
Chadwick International

PK-12 Curriculum Handbook

Updated January 2020



Introduction	3
Design (Grades 6-10)	5
Language and Literature/Literacy (English, Korean, Mandarin)	13
Language Acquisition (Mandarin, Korean, Spanish)	82
Makerspace (PK- Grade 5)	110
Mathematics	112
Performing Arts: Drama	167
Performing Arts: Music	174
Physical and Health Education	188
PK-Grade 5 Health Standards and Benchmarks	234
Science	243
Social Studies/Individuals and Societies	266
Visual Arts	281

Introduction

Welcome to Chadwick International’s first version of its PK-12 Curriculum Handbook. This publication comprises the current full list of standards and benchmarks which we have adopted for the 2019-2020 school year. All of these standards and benchmarks have been taken from reliable education sources and have been adapted to fit the Chadwick International context. As a point of reference, these are some of the education sources that have been used to frame our creation of Chadwick International standards and benchmarks:

- ACARA (Australian National Curriculum Standards for the Performing Arts)
- ACARA (Australian National Curriculum Standards for Design)
- AERO (American Education Reaches Out) Social Studies
- AERO (American Education Reaches Out) Language Arts
- AERO (American Education Reaches Out) Mathematics
- AERO (American Education Reaches Out) Visual Arts
- CCSS (Common Core State Standards) Mathematics
- ISTE (International Society for Technology in Education)
- KSCR (Korean Scholastic Credentials Recognition)
- NGSS (Next Generation Science Standards)
- MYP Language Acquisition Continuum
- PYP Arts Scope and Sequence
- PYP Language Scope and Sequence
- PYP Mathematics Scope and Sequence
- PYP Personal, Social, and Physical Education Scope and Sequence
- The Ontario Curriculum for Health and Physical Education

Please note that the Science and Social Studies standards and benchmarks for PK-5 published in this document have not yet been fully adapted for the Chadwick International context. The Village School faculty will work more with these two sets of standards and benchmarks in the near future to ensure that they provide a sound basis for the delivery of these two subject areas within the Homeroom units of inquiry in the Village School.

Please also note that for most subject areas, standards and benchmarks have not been identified for Grades 11 and 12. This is due to the fact that the nature of learning in IB Diploma Programme courses is generally considered to be fully outlined by IB through the aims and objectives set for each IB Diploma Program course. These aims and objectives are generally acknowledged to be an acceptable set of standards and benchmarks for pre-university studies.



Design (Grades 6-10)



ACARA: F-10: Technologies

Content: Design and Technologies knowledge and understanding

ACARA: Grade 6

Design and Technologies knowledge and understanding

- Examine how people in design and technologies occupations address competing considerations, including sustainability in the design of products, services, and environments for current and future use
- Investigate how electrical energy can control movement, sound or light in a designed product or system
- Investigate how and why food and fibre are produced in managed environments and prepared to enable people to grow and be healthy
- Investigate characteristics and properties of a range of materials, systems, components, tools and equipment and evaluate the impact of their use

Content: Design and Technologies processes and production skills

		Design and Technologies processes and production skills
		<ul style="list-style-type: none"> • Critique needs or opportunities for designing, and investigate materials, components, tools, equipment and processes to achieve intended designed solutions • Generate, develop, communicate and document design ideas and processes for audiences using appropriate technical terms and graphical representation techniques • Select appropriate materials, components, tools, equipment and techniques and apply safe procedures to make designed solutions • Negotiate criteria for success that include consideration of sustainability to evaluate design ideas, processes and solutions • Develop project plans that include consideration of resources when making designed solutions individually and collaboratively
		Achievement Standard: Design and Technologies
		Grade 6 Achievement Standard
		<ul style="list-style-type: none"> • By the end of Year 6 students describe some competing considerations in the design of products, services and environments taking into account sustainability. • Students describe how design and technologies contribute to meeting present and future needs. • Students explain how the features of technologies impact on designed solutions for each of the prescribed technologies contexts. • Students create designed solutions for each of the prescribed technologies contexts suitable for identified needs or opportunities. • Students suggest criteria for success, including sustainability considerations and use these to evaluate their ideas and designed solutions. • Students combine design ideas and communicate these to audiences using graphical representation techniques and technical terms. • Students record project plans including production processes. • Students select and use appropriate technologies and techniques correctly and safely to produce designed solutions.
		Content: Digital Technologies knowledge and understanding
		Digital Technologies knowledge and understanding
		<ul style="list-style-type: none"> • Examine the main components of common digital systems and how they may connect together to form networks to transmit data • Examine how whole numbers are used to represent all data in digital systems
		Content: Digital Technologies processes and production skills
		Digital Technologies processes and production skills
		<ul style="list-style-type: none"> • Acquire, store and validate different types of data, and use a range of software to interpret and visualise data to create information • Define problems in terms of data and functional requirements drawing on previously solved problems • Design a user interface for a digital system • Design, modify and follow simple algorithms involving sequences of steps, branching, and iteration (repetition) • Implement digital solutions as simple visual programs involving branching, iteration (repetition), and user input • Explain how developed solutions and existing information systems are sustainable and meet current and future local community needs • Plan, create and communicate ideas and information, including collaboratively online, applying agreed ethical, social and technical protocols
		Achievement Standard: Digital Technologies

		Grade 6 Achievement Standard
		<ul style="list-style-type: none"> • By the end of Year 6, students explain the fundamentals of digital system components (hardware, software and networks) and how digital systems are connected to form networks. • Students explain how digital systems use whole numbers as a basis for representing a variety of data types. • Students define problems in terms of data and functional requirements and design solutions by developing algorithms to address the problems. • Students incorporate decision-making, repetition and user interface design into their designs and implement their digital solutions, including a visual program. • Students explain how information systems and their solutions meet needs and consider sustainability. • Students manage the creation and communication of ideas and information in collaborative digital projects using validated data and agreed protocols.
Achievement Standard: Learning Area Technologies		
		Learning Area Specific
		<ul style="list-style-type: none"> • By the end of Grade 6, students explain how social, ethical, technical and sustainability considerations influence the design of solutions to meet a range of present and future needs. • Students explain how the features of technologies influence design decisions and how digital systems are connected to form networks. • Students describe a range of needs, opportunities or problems and define them in terms of functional requirements. • Students collect and validate data from a range of sources to assist in making judgements. • Students generate and record design ideas for specified audiences using appropriate technical terms, and graphical and non-graphical representation techniques including algorithms. • Students plan, design, test, modify and create digital solutions that meet intended purposes including user interfaces and a visual program. • Students plan and document processes and resources and safely produce designed solutions for each of the prescribed technologies contexts. • Students negotiate criteria for success, including sustainability considerations, and use these to judge the suitability of their ideas, solutions and processes. • Students use ethical, social and technical protocols when collaborating, and creating and communicating ideas, information and solutions face-to-face and online.

ACARA: F-10: Technologies	
Content: Design and Technologies knowledge and understanding	
	ACARA: Grades 7 - 8
Design and Technologies knowledge and understanding	

		<ul style="list-style-type: none"> Investigate the ways in which products, services and environments evolve locally, regionally and globally and how competing factors including social, ethical and sustainability considerations are prioritised in the development of technologies and designed solutions for preferred futures Analyse how motion, force and energy are used to manipulate and control electromechanical systems when designing simple, engineered solutions Analyse how food and fibre are produced when designing managed environments and how these can become more sustainable Analyse how characteristics and properties of food determine preparation techniques and presentation when designing solutions for healthy eating Analyse ways to produce designed solutions through selecting and combining characteristics and properties of materials, systems, components, tools and equipment
Content: Design and Technologies processes and production skills		
Design and Technologies processes and production skills		
		<ul style="list-style-type: none"> Critique needs or opportunities for designing and investigate, analyse and select from a range of materials, components, tools, equipment and processes to develop design ideas Generate, develop, test and communicate design ideas, plans and processes for various audiences using appropriate technical terms and technologies including graphical representation techniques Select and justify choices of materials, components, tools, equipment and techniques to effectively and safely make designed solutions Independently develop criteria for success to assess design ideas, processes and solutions and their sustainability Use project management processes when working individually and collaboratively to coordinate production of designed solutions
Achievement Standard: Design and Technologies		
Grades 7 and 8 Achievement Standard		
		<ul style="list-style-type: none"> By the end of Grade 8 students explain factors that influence the design of products, services and environments to meet present and future needs. Students explain the contribution of design and technology innovations and enterprise to society. Students explain how the features of technologies impact on designed solutions and influence design decisions for each of the prescribed technologies contexts. Students create designed solutions for each of the prescribed technologies contexts based on an evaluation of needs or opportunities. Students develop criteria for success, including sustainability considerations, and use these to judge the suitability of their ideas and designed solutions and processes. Students create and adapt design ideas, make considered decisions and communicate to different audiences using appropriate technical terms and a range of technologies and graphical representation techniques. Students apply project management skills to document and use project plans to manage production processes. Students independently and safely produce effective designed solutions for the intended purpose.
Content: Digital Technologies knowledge and understanding		
Digital Technologies knowledge and understanding		
		<ul style="list-style-type: none"> Investigate how data are transmitted and secured in wired, wireless and mobile networks, and how the specifications affect performance Investigate how digital systems represent text, image and audio data in binary

Content: Digital Technologies processes and production skills

Digital Technologies processes and production skills

- Acquire data from a range of sources and evaluate authenticity, accuracy and timeliness
- Analyse and visualise data using a range of software to create information, and use structured data to model objects or events
- Define and decompose real-world problems taking into account functional requirements and economic, environmental, social, technical and usability constraints
- Design the user experience of a digital system, generating, evaluating and communicating alternative designs
- Design algorithms represented diagrammatically and in English, and trace algorithms to predict output for a given input and to identify errors
- Implement and modify programs with user interfaces involving branching, iteration and functions in a general-purpose programming language
- Evaluate how student solutions and existing information systems meet needs, are innovative, and take account of future risks and sustainability
- Plan and manage projects that create and communicate ideas and information collaboratively online, taking safety and social contexts into account

Achievement Standard: Digital Technologies

Grade 7 and 8 Achievement Standard

- By the end of Year 8, students distinguish between different types of networks and defined purposes.
- Students explain how text, image and audio data can be represented, secured and presented in digital systems.
- Students plan and manage digital projects to create interactive information.
- Students define and decompose problems in terms of functional requirements and constraints.
- Students design user experiences and algorithms incorporating branching and iterations, and test, modify and implement digital solutions.
- Students evaluate information systems and their solutions in terms of meeting needs, innovation and sustainability.
- Students analyse and evaluate data from a range of sources to model and create solutions.
- Students use appropriate protocols when communicating and collaborating online.

Achievement Standard: Learning Area Technologies

Learning Area Specific

			<ul style="list-style-type: none"> • By the end of Year 8, students explain how social, ethical, technical and sustainability considerations influence the design of innovative and enterprising solutions to meet a range of present and future needs. • Students explain how the features of technologies influence design and production decisions. Students make choices between different types of networks for defined purposes. • Students explain a range of needs, opportunities or problems and define them in terms of functional requirements and constraints. • Students collect, authenticate and interpret data from a range of sources to assist in making informed judgements. • Students generate and document in digital and non-digital form, design ideas for different audiences using appropriate technical terms, and graphical representation techniques including algorithms. • Students independently and safely plan, design, test, modify and create a range of digital solutions that meet intended purposes including user interfaces and the use of a programming language. • Students plan, document and effectively manage processes and resources to produce designed solutions for each of the prescribed technologies contexts. • Students develop criteria for success, including innovation and sustainability considerations, and use these to judge the suitability of their ideas, solutions and processes. • Students use appropriate protocols when collaborating, and creating and communicating ideas, information and solutions face-to-face and online.
--	--	--	--

ACARA: F-10: Technologies

Content: Design and Technologies knowledge and understanding

ACARA: Grade 9-10

Design and Technologies knowledge and understanding

- Critically analyse factors, including social, ethical and sustainability considerations, that impact on designed solutions for global preferred futures and the complex design and production processes involved
- Explain how products, services and environments evolve with consideration of preferred futures and the impact of emerging technologies on design decisions
- By the end of Year 10 students will have had the opportunity to design and produce designed solutions for one or more of the technologies contexts below.
- Investigate and make judgments on how the characteristics and properties of materials are combined with force, motion and energy to create engineered
- Investigate and make judgments on the ethical and sustainable production and marketing of food and fibre
- Investigate and make judgments on how the principles of food safety, preservation, preparation, presentation and sensory perceptions influence the creation of food solutions for healthy eating
- Investigate and make judgments on how the characteristics and properties of materials, systems, components, tools and equipment can be combined to create designed solutions
- Investigate and make judgments, within a range of technologies specialisations, on how technologies can be combined to create designed solutions

Content: Design and Technologies processes and production skills

Design and Technologies processes and production skills

		<ul style="list-style-type: none"> • Critique needs or opportunities to develop design briefs and investigate and select an increasingly sophisticated range of materials, systems, components, tools and equipment to develop design ideas • Develop, modify and communicate design ideas by applying design thinking, creativity, innovation and enterprise skills of increasing sophistication • Work flexibly to safely test, select, justify and use appropriate technologies and processes to make designed solutions • Evaluate design ideas, processes and solutions against comprehensive criteria for success recognising the need for sustainability • Develop project plans using digital technologies to plan and manage projects individually and collaboratively taking into consideration time, cost, risk and production processes
Achievement Standard: Design and Technologies		
Grade 9 and 10 Achievement Standard		
		<ul style="list-style-type: none"> • By the end of Year 10 students explain how people working in design and technologies occupations consider factors that impact on design decisions and the technologies used to produce products, services and environments. • Students identify the changes necessary to designed solutions to realise preferred futures they have described. • When producing designed solutions for identified needs or opportunities students evaluate the features of technologies and their appropriateness for purpose for one or more of the technologies contexts. • Students create designed solutions for one or more of the technologies contexts based on a critical evaluation of needs or opportunities. • Students establish detailed criteria for success, including sustainability considerations, and use these to evaluate their ideas and designed solutions and processes. • Students create and connect design ideas and processes of increasing complexity and justify decisions. • Students communicate and document projects, including marketing for a range of audiences. • Students independently and collaboratively apply sequenced production and management plans when producing designed solutions, making adjustments to plans when necessary. • Students select and use appropriate technologies skilfully and safely to produce high quality designed solutions suitable for the intended purpose.
Content: Digital Technologies knowledge and understanding		
Digital Technologies knowledge and understanding		
		<ul style="list-style-type: none"> • Investigate the role of hardware and software in managing, controlling and securing the movement of and access to data in networked digital systems • Analyse simple compression of data and how content data are separated from presentation
Content: Digital Technologies processes and production skills		
Digital Technologies processes and production skills		

			<ul style="list-style-type: none"> • Develop techniques for acquiring, storing and validating quantitative and qualitative data from a range of sources, considering privacy and security requirements • Analyse and visualise data to create information and address complex problems, and model processes, entities and their relationships using structured data • Define and decompose real-world problems precisely, taking into account functional and non-functional requirements and including interviewing stakeholders to identify needs • Design the user experience of a digital system, evaluating alternative designs against criteria including functionality, accessibility, usability, and aesthetics • Design algorithms represented diagrammatically and in structured English and validate algorithms and programs through tracing and test cases • Implement modular programs, applying selected algorithms and data structures including using an object-oriented programming language • Critically evaluate how well developed solutions and existing information systems and policies take account of future risks and sustainability and provide opportunities for innovation and enterprise • Create interactive solutions for sharing ideas and information online, taking into account safety, social contexts and legal responsibilities • Plan and manage projects using an iterative and collaborative approach, identifying risks and considering safety and sustainability
--	--	--	--

Achievement Standard: Digital Technologies

Grade 9 and 10 Achievement Standard

			<ul style="list-style-type: none"> • By the end of Grade 10, students explain the control and management of networked digital systems and the security implications of the interaction between hardware, software and users. • Students explain simple data compression, and why content data are separated from presentation. • Students plan and manage digital projects using an iterative approach. • Students define and decompose complex problems in terms of functional and non-functional requirements. • Students design and evaluate user experiences and algorithms. • Students design and implement modular programs, including an object-oriented program, using algorithms and data structures involving modular functions that reflect the relationships of real-world data and data entities. • Students take account of privacy and security requirements when selecting and validating data. • Students test and predict results and implement digital solutions. • Students evaluate information systems and their solutions in terms of risk, sustainability and potential for innovation and enterprise. • Students share and collaborate online, establishing protocols for the use, transmission and maintenance of data and projects.
--	--	--	--

Language and Literature/Literacy (English, Korean, Mandarin)



Literacy PK - Grade 5

Aims of Literacy Development

Language learning is a lifelong skill that enables learners to meet the present and future needs in a global context. It encompasses

- the ability to communicate across cultures in different contexts
- access information in various fields for different purposes
- develop critical literacies in order to understand, share opinions and present ideas
- develop critical and complex thinking to create and problem-solve

Objective A. Listening and Speaking

The elements of the oral language include:

- being able to demonstrate active and focused attention to make sense of what is heard
- being able to engage in purposeful conversation

-
- being able to articulate ideas to inform, negotiate, criticize, and analyze
 - being able to construct and express meaning

Objective B. Reading

The elements of the written language include:

- being able to read for appreciation
- being able to develop and apply reading skills
- being able to construct meaning from text
- being able to clarify ideas, feelings, thoughts and opinions through texts
- being able to inquire into concepts through non-fiction texts
- being able to develop one's thinking through texts

Objective C. Writing

The elements of the written language include:

- being able to express oneself through organized thoughts, ideas, and information
- being able to develop structures and styles to effectively convey ideas
- being able to express oneself in written form for different purposes

Objective D. Viewing and Presenting

- being able to interpret data presented in different forms
- being able to create visuals for pragmatic use
- being able to explore expressive abilities
- being able to use a variety of visual texts from different sources of information

Additional Language Expectations in CI Village School

Phonics Continuum

- We take a whole language approach to reading and writing in Early Years.
- Phonemic awareness is introduced and integrated in PK & K as students demonstrate reading and writing readiness.
- It is not taught formally as a stand-alone lesson but rather integrated into experiences where and when appropriate.
- G1 & G2 - "Foundations" and "Words their Way" resources are available to support students who may require additional support. This is based upon individual student need.

Handwriting/Typing

Handwriting refers to execution, legibility and speed - (once students are able to form letters from memory).

- Early Years - Handwriting skills
- G2 - Handwriting when identified and needed (possible resource to support: Foundations)
- G3 - introduction of keyboard skills via iPad keyboard
- G4 & G5 - Keyboard skills, finger placement

Oral Language

A balanced program will provide meaningful and well-planned opportunities for learners to participate as listeners as well as speakers. (PYP Scope and Sequence)

-
- active and conscious listening
 - purposeful talk
 - recognize and use certain types of language according to the audience and purpose
 - expose the thinking of the learner
 - used to negotiate and construct meaning

Visual Language - Viewing and Presenting

- These processes involve interpreting, using and constructing visuals and multimedia in a variety of situations and for a range of purposes and audiences.
- Students should understand ways in which images and language interact to convey ideas, values and beliefs.
- Visual texts may be paper, electronic or live, observable forms of communication that are consciously constructed to convey meaning and immediately engage viewers, allowing them instant access to data.

The CI Village School Continuum of Literacy Development

Phase 1

Written Language - Writing

Learners will understand that

- Writing conveys meaning
- People write to tell about their experiences, ideas and feelings



-
- Everyone can express themselves in writing
 - Talking about our stories and pictures helps other people to understand and enjoy them

Written Language - Reading

Learners will understand that

- Illustrations convey meaning
- Print conveys meaning
- People read for pleasure
- Stories can tell about imagined worlds
- Printed information can tell about the real world
- There are established ways of setting out print and organizing books

Oral Language - Listening and Speaking

Learners will understand that

- Spoken words connect us with others
- People listen and speak to share
- People ask questions to learn from others

Visual Language - Viewing and Presenting

Learners will understand that

- Visual language is all around us
- The pictures, images, and symbols in our environment have meaning
- We can enjoy and learn from visual language

Comprehension Strategies

Learners will understand that

- Illustrations convey meaning
- Print conveys meaning
- People read for pleasure
- Stories can tell about imagined words
- Printed information can tell about the real world
- There are established ways of setting out print and organizing books

Phase 2

Written Language - Writing

Learners will understand that

- People write to communicate
- The sounds of spoken language can be represented visually (letters, symbols, characters)
- Consistent ways of recording words or ideas enable members of a language community to understand each other's writing
- Written language works differently from spoken language

Written Language - Reading

Learners will understand that

- The sounds of spoken language can be represented visually

-
- Written language works differently from spoken language
 - Consistent ways of recording words or ideas enable members of a language community to communicate
 - People read to learn
 - The words we see and hear enable us to create pictures in our minds

Oral Language - Listening and Speaking

Learners will understand that

- The sounds of language are a symbolic way of representing ideas and objects
- People communicate using different languages
- Everyone has the right to speak and be listened to

Visual Language - Viewing and Presenting

Learners will understand that

- People use static and moving images to communicate ideas and information
- Visual texts can immediately gain our attention
- Viewing and talking about the images others have created helps us to understand and create our own presentations

Comprehension Strategies

Learners will understand that

- The sounds of spoken language can be represented visually
- Written language works differently from spoken language
- Consistent ways of recording words or ideas enable members of a language community to communicate
- People read to learn
- The words we see and hear enable us to create pictures in our minds

Phase 3

Written Language - Writing

Learners will understand that

- We write in different ways for different purposes
- The structure of different types of texts includes identifiable features
- Applying a range of strategies helps us to express ourselves so that others can enjoy our writing
- Thinking about storybook characters and people in real life helps us to develop characters in our own stories
- When writing, the words we choose and how we choose to use them enable us to share our imaginings and ideas

Written Language - Reading

Learners will understand that

- Different types of texts serve different purposes
- What we already know enables us to understand what we read
- Applying a range of strategies helps us to read and understand new texts
- Wondering about texts and asking questions helps us to understand the meaning

-
- The structure and organization of written language influences and conveys meaning

Oral Language - Listening and Speaking

Learners will understand that

- Spoken language varies according to the purpose and audience
- People interpret messages according to their unique experiences and ways of understanding
- Spoken communication is different from written communication - it has its own set of rules

Visual Language - Viewing and Presenting

Learners will understand that

- Visual texts can expand our database of sources of information
- Visual texts provide alternative means to develop new levels of understanding
- Selecting the most suitable forms of visual presentation enhances our ability to express ideas and images
- Different visual techniques produce different effects and are used to present different types of information

Comprehension Strategies

Learners will understand that

- Different types of texts serve different purposes
- What we already know enables us to understand what we read
- Applying a range of strategies helps us to read and understand new texts
- Wondering about texts and asking questions helps us to understand the meaning
- The structure and organization of written language influences and conveys meaning

Phase 4

Written Language - Writing

Learners will understand that

- Writing and thinking work together to enable us to express ideas and convey meaning
- Asking questions of ourselves and others helps us to make our writing more focused and purposeful
- The way we structure and organize our writing helps others to understand and appreciate it
- Rereading and editing our own writing enables us to express what we want to say more clearly

Written Language - Reading

Learners will understand that

- Reading and thinking work together to enable us to make meaning
- Checking, rereading and correcting our own reading as we go enable us to read new and more complex texts
- Identifying the main ideas in the text helps us to understand what is important
- Knowing what we aim to achieve helps us to select useful reference material to conduct research

Oral Language - Listening/Speaking

Learners will understand that

-
- Taking time to reflect on what we hear and say helps us to make informed judgments and form new opinions
 - Thinking about the perspective of our audience helps us to communicate more effectively and appropriately
 - The grammatical structures of a language enable members of a language community to communicate with each other

Visual Language - Viewing and Presenting

Learners will understand that

- Visual texts have the power to influence thinking and behavior
- Interpreting visual texts involves making an informed judgment about the intention of the message
- To enhance learning we need to be efficient and constructive users of the internet

Comprehension Strategies

Learners will understand that

- Reading and thinking work together to enable us to make meaning
- Checking, rereading and correcting our own reading as we go enable us to read new and more complex texts
- Identifying the main ideas in the text helps us to understand what is important
- Knowing what we aim to achieve helps us to select useful reference material to conduct research

Phase 5

Written Language - Writing

Learners will understand that

- Stories that people want to read are built around themes to which they can make connections
- Effective stories have a purpose and structure that help to make the author's intention clear
- Synthesizing ideas enables us to build on what we know, reflect on different perspectives, and express new ideas
- Knowing what we aim to achieve helps us to plan and develop different forms of writing
- Through the process of planning, drafting, editing and revising, our writing improves over time

Written Language - Reading

Learners will understand that

- Authors structure stories around significant themes
- Effective stories have a structure, purpose and sequence of events (plot) that help to make the author's intention clear
- Synthesizing ideas and information from texts leads to new ideas and understanding
- Reading opens our minds to multiple perspectives and helps us to understand how people think, feel and act

Oral Language - Listening and Speaking

Learners will understand that

- Spoken language can be used to persuade and influence people
- Metaphorical language creates strong visual images in our imagination

- Listeners identify key ideas in spoken language and synthesize them to create their own understanding
- People draw on what they already know in order to infer new meaning from what they hear

Visual Language - Viewing and Presenting

Learners will understand that

- The aim of commercial media is to influence and persuade viewers
- Individuals respond differently to visual texts, according to their previous experiences, preferences and perspectives
- Knowing about the techniques used in visual texts helps us to interpret presentations and create our own visual effects
- Synthesizing information from visual texts is dependent upon personal interpretation and leads to new understanding

Comprehension Strategies

Learners will understand that

- Authors structure stories around significant themes
- Effective stories have a structure, purpose and sequence of events (plot) that help to make the author's intention clear
- Synthesizing ideas and information from texts leads to new ideas and understanding
- Reading opens our minds to multiple perspectives and helps us to understand how people think, feel and act

Written Language - Writing - Pre-K

Text Types

- Differentiate between illustrations and written text
- Begin to listen and respond to shared books (enlarged texts), observing conventions of print, according to the language(s) of instruction

Content and Traits

Ideas

- Show curiosity and ask questions about written language
- Use their own experience as a stimulus when drawing and writing
- Choose desired topic with guidance
- Choose interesting and relevant details with guidance
- Explain content with some details through guided questions

Content and Traits

Organization

- Begin to identify beginning, middle, and end
- Begin to choose a title

Content and Traits

Voice

- Begin to create marks that are expressive and show feelings and experiences.
- Begin to demonstrate awareness of an audience

Content and Traits

Conventions (Spelling, Punctuation, Grammar, Handwriting, Keyboarding)

- Write their own name
- Begin to show an awareness of sound–symbol relationships and begin to recognize the way that some familiar sounds can be recorded
- Begin to explore writing simple words and give them meaning e.g. inventive spelling and mark making
- Begin to apply letter-sound knowledge to write initial sounds of words
- Further developing fine motor skills such as cutting, pinching, pasting, tearing, painting, molding and pouring, drawing etc.
- Begin to form letters/characters conventionally
- Begin to demonstrate an awareness of the conventions of written text, for example left to right, top to bottom

Process (Pre-writing, Drafting, Revising, Editing, Publishing)

- Choose to write as play, or in informal situations, for example, filling in forms in a pretend post office, writing a menu or wish list for a party
- Discriminate between letters/characters, numbers and symbols
- Enjoy writing (role play/mark making) and value their efforts
- Begin to experience shared writing, observing the teacher’s writing and making suggestions
- Illustrate their own writing and contribute to a class book or collection of published writing (teacher scribing)

Written Language - Reading - Pre-K

Conventions of Print

- Sort and match pictures based on common elements
- Discriminate between letters, numbers and symbols
- Begin to understand the print is permanent
- Recognize the environmental print within the classroom
- Begin to realize that the organization of on-screen text is different from how text is organized in a book, e.g. scroll down, turning pages from left to right
- Begin to have knowledge of the basic conventions of the language(s) of instruction in printed text, for example, orientation, directional movement, layout

Word Recognition and Vocabulary Building

- Recognize their own first name and some of their peers' names
- Distinguish between pictures and written text, for example, can point to a picture when asked
- Discriminate between visual representations such as symbols, numbers, ICT iconography, letters and words
- Begin to recognize symbols, characters, labels and some high-interest and inquiry words

Decoding

- Join in with chants, poems, songs, word games and clapping games, gaining familiarity with the sounds and patterns of the language of instruction
- Begin to use a variety of strategies to read print, i.e. picture clues, prior knowledge, sight words, comprehension, phonological awareness and self-correction

Fluency

- Begin to recognize repeated patterns in a familiar story ie: Brown Bear, Brown Bear

Organizational Features

- Identify the different characters of a story and settings of a story
- Show empathy for characters in a story
- Begin to identify the beginning and end of a story
- Begin to sequence the main events of stories

Text Types

- Begin exposure to different types of texts

Read for a Variety of Purposes

- Participate in shared reading, +F92:H118 join in with rhymes, refrains and repeated text as they gain familiarity
- Begin to ask questions about stories read aloud
- Choose and "read" picture books for pleasure
- Enjoy listening to stories and begin to select and re-read favorite texts
- Handle books, showing an understanding of how a book works, for example, cover, beginning, directional movement, end
- Locate and respond to aspects of interest in self-selected texts (pointing, examining pictures closely, commenting)
- Listen attentively and respond appropriately to stories read aloud
- Begin to show awareness of the library as a tool for research (books, online resources)

Oral Language - Listening - Pre-K

Listening

- Follow classroom directions and routines, using context clues
- Realize that people speak different languages

Oral Language - Speaking - Pre-K

Small group and public speaking

- Use different gestures, actions, body language and/or words to communicate needs and to express ideas
- Listen and respond to picture books, showing pleasure, and demonstrating their understanding through gestures, expression and/or words
- Name classmates, teachers and familiar classroom and playground objects
- Interact effectively with peers and adults in familiar social settings
- Tell their own stories using simple sentences, gestures, and objects/artifacts
- Use two word phrases and simple sentences in context
- Recite poems, rhymes, songs and repeated phrases in shared books
- Understand simple and complex questions and respond with actions or phrases and sentences
- Hear and appreciate differences between languages
- Use own grammar style as part of the process of developing grammatical awareness ,e.g. he, she I, me, you
- Begin to distinguish beginning, and ending sounds of words with teacher support

Visual Language - Viewing and Presenting - Pre-K

Building Awareness and Viewing

- Respond to visual information showing understanding through play, gestures, and facial expressions.
- Reveal their own feelings in response to visual presentations, for example, by showing amusement, curiosity, surprise; observe visual cues that indicate context; show understanding by matching pictures with context
- Recognize familiar signs, labels and logos, for example, pedestrian walking sign, emergency exit sign, no dogs allowed; identify similarities and differences
- Make personal connections to visual texts, for example, a picture book about children making friends in a new situation

Presenting

- Use body language to communicate and to convey understanding, for example, pointing, gesturing, facial expressions
- Select and incorporate colours, shapes, symbols and images into visual presentations
- Show appreciation of illustrations in picture books by selecting and rereading familiar books, focusing on favourite pages
- Use verbal and nonverbal responses to a variety of media.

Comprehension Strategies Pre-K

Monitoring Comprehension

- Express opinions about the meaning of a story
- Answer questions to demonstrate understanding
- Begin to explain the meaning of words

Determining Important Ideas

- Identify main events to demonstrate understanding
- Identify sequence of events (beginning, middle and end)
- Begin to identify problems/conflicts and solutions

Making Connections

- Make connections to their own experience and others when listening to or "reading" texts
- Begin to share prior knowledge before, during and after reading
- Begin to make personal connections by comparing text to self

Visualizing

- Begin to create mental images through oral and written (drawings and other visual representations)

Questioning

- Show curiosity and ask questions about pictures or text
- Begin to ask where to find answers to questions
- Ask who, what, when, where, why and how questions to find information and to clarify

Summarizing

- Begin to retell the main ideas
- Identify the most important idea

Inferring

- Begin to listen and respond to read-aloud situations; make predictions, anticipate possible outcomes
- Begin to think ahead to make a judgment using background knowledge and clues from text

Written Language - Writing - Kindergarten

Text Types

- Begin to communicate a message to a particular audience, for example, a news story, instruction, letters, invitations
- Listen and respond to shared books (enlarged texts), observing conventions of print, according to the language(s) of instruction

Content and Traits

Ideas

- Consistently showing curiosity and asking and answering questions about written language
- Begin to write informally about their own ideas, experiences, initially using simple sentence structures, for example, "I like...", "I can...", "I went to ...", "I am going to..."
- Choose desired topic independently
- Choose interesting and relevant details independently
- Explain content with thorough details

Content and Traits

Organization

- Identify and sequence beginning, middle, and end
- Choose a title independently

Content and Traits

Voice

- Create drawings that are expressive and show feelings and experiences with independence
- Demonstrate awareness of an audience

Content and Traits

Word Choice

- Begin to use the appropriate word in the right context

Content and Traits

Conventions (Spelling, Punctuation, Grammar, Handwriting, Keyboarding)

- Write their own name independently and names of some friends/family members
- Connect written codes with the sounds of spoken language and reflect this understanding when recording ideas
- Writing simple words and give them meaning e.g. c-v-c words and inventive spelling
- Apply letter-sound knowledge to write initial and final sounds of words
- Write an increasing number of frequently used words or ideas independently
- Aware of the use of capitals in writing
- Confidently using fine motor skills to manipulate a variety of tools and materials (scissors/pencils)
- Form letters/characters conventionally with an understanding as to why this is important within a language community
- Demonstrate an awareness of the conventions of written text, for example, sequence, spacing, directionality

Process (Pre-writing, Drafting, Revising, Editing, Publishing)

- Read their own writing to the teacher and to classmates, realizing that what they have written remains unchanged
- Begin to discriminate between types of code, for example, letters, numbers, symbols, words/characters (use lower and upper case letters in writing)
- Enjoy writing and value their own efforts
- Participate in shared and guided writing observing the teacher's model, asking questions and offering suggestions
- Illustrate their own writing and contribute to a class book or collection of published writing
- Create illustrations to match their own written text
- Begin to work cooperatively with a teacher or peer to discuss and extend their stories, taking the roles of authors and readers

Written Language - Reading - Kindergarten

Conventions of Print

- Sort and match pictures based on common elements with explanation from the students
- Understand that print is permanent
- Indicate printed text where teacher should start reading
- Realize that the organization of on-screen text is different from how text is organized in a book, e.g. scroll down, turning pages from left to right
- Have a secure knowledge of the basic conventions of the language(s) of instructed in printed text: orientation, directional movement, layout, spacing and basic punctuation

Word Recognition and Vocabulary Building

- Recognize their own name, their classmates, teachers and family members' names
- Distinguish between pictures and written text and be able to explain
- Read and understand familiar print from the immediate environment, for example, signs, advertisements, logos, ICT iconography
- Recognize symbols, labels, characters and high-interest and inquiry words
- Read KG high frequency words independently

Decoding

- Begin to read c-v-c words phonetically
- Join in consistently with chants, poems, songs, word games and clapping games, gaining familiarity with the sounds and patterns of the language of instruction
- Begin to use a variety of strategies to decode unknown words, i.e. picture clues, re-reading, reading on, chunking, prior knowledge, sight words, comprehension, phonological awareness and self-correction
- Develop the use of meaning, visual, contextual and memory cues (teacher monitors miscues to identify strategies used and strategies to be developed)

Fluency

- Read simple sentences
- Begin to read texts in phrases/sentences with pace and expression

Organizational Features

- Identify the different characters, settings and storyline
- Show empathy for characters and explain the reason for the feeling
- Identify the beginning, middle and end of a story
- Arrange and explain the sequence of stories and events

Text Types

- Recognize and explain the difference between fiction and non-fiction books
- Begin to demonstrate an awareness of different genres: instructions, fairy tales, and stories

Read for a Variety of Purposes

- Ask questions about stories read aloud
- Begin to choose, share, read a variety of texts for pleasure
- Select and re-read favorite texts for enjoyment
- Begin to explore a variety of texts for appropriate purpose, interest and reading levels
- Begin to participate in learning engagements involving reading aloud - taking roles and reading dialogue, repeating refrains from familiar stories, reciting poems
- Student initiated participation in shared reading, posing and responding to questions and joining in the refrains
- Begin to participate in guided reading situations, observing and applying reading behaviors and interacting with the group
- Use the library as a tool for research (books, online resources)

Oral Language - Listening - Kindergarten

Listening

- Follow classroom instructions, showing understanding
- Obtain simple information from accessible spoken texts
- Follow two-step directions
- Listen to and enjoy stories read aloud; show understanding by predicting and/or responding to stories read aloud

Oral Language - Speaking - Kindergarten

Small group and public speaking

- Memorize and join in with poems, rhymes and songs
- Begin to communicate in more than one language
- Begin to use grammatical rules of the language(s) of instruction (learners may overgeneralize at this stage)
- Distinguish beginning, medial and ending sounds of words with increasing accuracy
- Use language to address their needs and express feelings
- Ask questions to gain information
- Respond to inquiries directed to themselves or to the class
- Use oral language to communicate during classroom activities, conversations and imaginative play
- Talk about the stories, pictures and models they have created

Visual Language - Viewing and Presenting - Kindergarten

Building Awareness and Viewing

- Attend to visual information showing understanding through discussion, role play, illustrations
- Begin to talk about their own feelings in response to visual messages; begin to - - - show empathy for the way others might feel
- Begin to locate familiar visual texts in the learning environment, and connect them with associated products
- Relate to different contexts presented in visual texts according to their own experiences, for example, “That looks like my uncle’s farm”; Connect visual information with their own experiences to construct their own meaning, for example, when taking a trip
- View different versions of the same story and discuss the different ways of telling the same story, for example, the picture book version and the film/movie version of a story through teacher guidance
- Observe visual images and begin to appreciate, that they have been created to achieve particular purposes

Presenting

- Use body language in mime and role play to communicate ideas and feelings visually
- Begin to realize that shapes, symbols and colours have meaning
- Observe and discuss illustrations in picture books, simple reference books and digital media, and begin to comment on the information being conveyed
- Listen to terminology associated with visual texts and understand terms such as colour, shape, size
- Use verbal responses to a variety of media. (Begin to use a variety of implements to practise and develop handwriting and presentation skills)
- Begin to recognize ICT iconography and follow prompts to access programs or activate devices
- Show their understanding that visual and non-verbal messages influence our behaviour.

Comprehension Strategies - Kindergarten

Monitoring Comprehension

-
- Read and understand the meaning of self-selected and teacher-selected texts at an appropriate level
 - Answer questions to demonstrate understanding
 - Explain the meaning of words

Determining Important Ideas

- Identify and discuss main events to demonstrate understanding
- Identify sequence of events (beginning, middle and end) and explain
- Identify problems/conflicts and solutions

Making Connections

- Make connections to and further explain their own and others' experience and to texts when listening to or "reading" texts
- Share prior knowledge during and after reading
- Begin to make personal connections by comparing text to text

Visualizing

- Create mental images through oral and written stories (drawings and visual representations)

Questioning

- Ask questions while reading to clarify understanding
- Ask where to find answers to questions
- Ask who, what when, where, why and how questions to find information and to clarify

Summarizing

- Retell the main ideas
- Identify and describe/discuss further the most important idea

Inferring

- Listen attentively and respond actively to read-aloud situations; make predictions, anticipate possible outcomes
- Begin to think ahead to make a judgment using background knowledge and clues from text

Analyzing/ Evaluating

- Begin to connect text to other ideas
- Begin to analyze familiar genres

Written Language - Writing - Grade 1

Content and Traits - Ideas

- Most ideas are on topic and related.
- Begin to include details in their writing.
- Begin to record ideas using organizers
- Write about a topic for a purpose
- Include a clear conclusion when writing non-fiction texts
- Include simple description of characters

Content and Traits - Organization

- Write related ideas in a paragraph based on the given topic

Content and Traits - Voice

- Write informally about their own ideas, experiences and feelings in a personal journal or diary, initially expresses feelings and emotions through writing

Content and Traits - Word Choice

- Begin to select vocabulary appropriate to text forms
- Begin to experiment with words to express ideas in new ways
- Begin to use dictionary and word banks to extend the use of language
- Draw upon a bank of familiar words, word walls and class made lists

Content and Traits - Sentence Fluency

- Connects simple sentences to the main idea
- Use simple sentence structures confidently, for example, "I like..", "I can...", "I went to...", "I am going to..."

Content and Traits - Conventions (Spelling, Punctuation, Grammar, Handwriting, Keyboarding)

- Write their first and last name independently using correct letter size and formation.
- Competently connects written codes with the sounds of spoken language and reflect this understanding using common spelling patterns, letter knowledge and environmental print.
- Spell grade appropriate high frequency words correctly
- Begin to use capitalisation correctly for sentence beginnings and proper nouns
- Use punctuation (full stops) correctly for simple sentences.
- Begin to use question marks, and exclamation marks.
- Identify and uses parts of speech, such as, nouns, synonyms, antonyms, verbs and adjectives.
- Become aware of the correct tense for the writing genre with subject-verb agreement.
- Form letters/characters conventionally and legibly, with an understanding as to why this is important within a language community
- Use the conventions of written text, for example, sequence, spacing, directionality

Process (Pre-writing, Drafting, Revising, Editing, Publishing)

- Read their own writing to the teacher and self correct their written mistakes
- Create illustrations to enhance their own written text
- Use a picture plan with labels and begin to use graphic organizer to plan writing
- Begin to work cooperatively with a teacher or peer to discuss and improve each other's work, taking the roles of authors and readers
- Publish written work, in handwritten form or in digital form.

Written Language - Reading - Grade 1

Conventions of Print

- Understand that print is permanent, for example, when listening to familiar stories, notice when the reader leaves out or changes parts
- Realize that the organization of on-screen is different from how text is organized in a book, e.g. scroll down, turn pages
- Have a secure knowledge of the basic conventions of the language(s) of instructed in printed text: orientation, directional movement, layout, spacing, punctuation, return sweep

Word Recognition and Vocabulary Building

- Read and understand and use familiar print from the immediate environment, for example, signs, advertisements, logos, ICT iconography
- Instantly recognize basic unit of inquiry words, characters or symbols
- Read Grade 1 high frequency words independently

Decoding

- Read c-v-c and phonemes independently
- Use a variety of strategies to decode unknown words, i.e. picture clues, re-reading, reading on, chunking, prior knowledge, sight words, comprehension, syllables, phonological awareness and self-correction
- Cross-check cues against each other, when necessary (teacher monitors miscues to identify strategies used and strategies to be developed)
- Understand sound-symbol relationships and begin to apply reliable phonetic strategies when decoding print

Fluency

- Read texts in phrases/sentences with pace and expression

Organizational Features

- Identify the characters, setting, problem and solution of a story
- Identify the beginning, middle and end of a story and knows the purpose of these parts
- Recognize the features of non-fiction texts, i.e. titles, captions, headings, table of contents, glossary, index

Text Types

- Realize that there is a difference between fiction and non-fiction
- Demonstrates an awareness of different genres: information report, instructions, narratives, fairy tales and stories

Read for a Variety of Purposes

- Continue to select and re-read favorite texts for enjoyment
- Locate and select texts for a variety of purposes appropriate to purpose, interest and reading level
- Participate in learning engagements involving reading aloud - taking roles and reading dialogue, repeating refrains from familiar stories, reciting poems
- Participate in shared reading, posing and responding to questions and joining in the refrains (repeated parts)
- Participate in guided reading situations, observing and applying reading behaviors and interacting effectively with the group
- Use the library as a tool for research (books, online resources)
- Begin to recognize that ideas come from different types of media
- Participate in class author studies, appreciating what it means to be an author

Retelling

- Retell a narrative in the correct sequence including setting and characters
- Retell the key information from a grade appropriate non-fiction text

Oral Language - Listening - Grade 1

Listening

- Obtain simple information from accessible spoken texts
- Follow three-step directions
- Listen to and enjoy stories read aloud
- Listen and respond in small or large groups for increasing periods of time
- Demonstrate active listening by remaining silent while others are speaking

Oral Language - Speaking - Grade 1

Small group and public speaking

- Begin to communicate in more than one language
- Use grammatical rules of the language of instruction
- Present some ideas verbally
- Begin to generate concept based questions to generate inquiry
- Dramatize familiar stories with use of toys, props, puppets and plays
- Talk about the stories, writing, pictures and models they have created
- Identify how tone, voice level, and intonation convey a message
- Paraphrase simple oral and written information
- Participate in large group presentations with prompts
- Experiment using different vocabulary
- Inquire about the meaning of unknown words encountered as spoken words

Visual Language - Viewing and Presenting - Grade 1

Building Awareness and Viewing

- Discuss their own feelings in response to visual messages, listen to responses, and realize people react differently
- Locate familiar visual texts in magazines, advertising catalogues, and connect them with associated products
- View different versions of the same story and notice the different ways of telling the same story, for example, the picture book version and the film/movie version of a story
- Observe visual images to gather information

Presenting

- Use body language in a variety of ways to communicate ideas and feelings visually
- Begin to realize that shapes, symbols and colours have meaning and include them in presentations
- Through teacher modeling, begin to become aware of the terminology used to tell about visual effects, for example, features, layout, border, frame
- Begin to apply skills to search for, record and present information from a variety of media and texts
- Begin to recognize the use and organization of visual effects to create a particular impact, for example, dominant images show what is important in a story

Comprehension Strategies - Grade 1

Monitoring Comprehension

- Ask and answer questions to understand text

Determining Important Ideas

- Identify the beginning, middle and end of a story and knows the purpose of those parts
- Identify the characters, setting, problem and solution of a story
- Begin to recognize text features such as titles, headings, captions, illustrations, authors and illustrators

Making Connections

- Activate prior knowledge before, during and after reading
Make text-to-self or personal connections to books during independent reading; in shared reading or read aloud, identify text-to-text or text-to-world connections

Visualizing

- Create mental images when reading or listening to stories

Questioning

- Ask where to find information to questions
- Ask who, what, when, where, why, how questions to find information and clarify meaning

Summarizing

- Retell a story in sequence from independent reading, identifying the main idea
- Recall facts from nonfiction texts independently.

Inferring

- Listen attentively and respond actively to read aloud situations; make predictions showing an understanding of title, ideas, events and characters.

Analyzing/ Evaluating

- Demonstrate an awareness of different genres.
- Recognize there is a difference between fiction and nonfiction.

Written Language - Writing - Grade 2

Content and Traits - Ideas

- Ideas are on topic and related.
- Include details to support the topic
- Begin to experiment alternative ways of recording
- Write about a range of topics for a variety of purposes, using literary forms and structures modeled by the teacher and/or encountered in reading
- Write a story with a beginning, and end; and a developed middle.
- Write clear introductions for non-fiction texts
- Include character and setting description

Content and Traits - Organization

- Begin to organise ideas into paragraphs with some detail

Content and Traits - Voice

- Begin to develop an individual writing style

Content and Traits - Word Choice

- Select vocabulary appropriate to text forms
- Begin to include alliteration, onomatopoeia in their writing
- Begin to use a dictionary and word banks to extend their use of language
- Draw upon a grade level bank of vocabulary words, e.g. word walls, lists, synonyms, simple dictionaries, etc.

Content and Traits - Sentence Fluency

- Write compound sentences

Content and Traits - Conventions (Spelling, Punctuation, Grammar, Handwriting, Keyboarding)

- Competently connects written codes with the sounds of spoken language and reflect this understanding using common spelling patterns, letter knowledge and environmental print.
- Spell grade appropriate high frequency words correctly
- Use capitalisation correctly at the beginning of sentences and proper nouns.
- Use appropriate punctuation to support meaning and tone (full stops, speech marks, exclamation marks, question marks).
- Develop an awareness of quotation marks and commas in a list.
- Identify and use common nouns, proper nouns, verbs, synonyms, antonyms, pronouns, prepositions and adjectives
- Begin to use the correct tense for the writing genre with subject- verb agreement.
- Form letter/characters including appropriate size and spacing

Process (Pre-writing, Drafting, Revising, Editing, Publishing)

- Use editing checklist and grade appropriate resources to independently edit writing.
- Use a graphic organizer to plan writing of familiar genres
- Use feedback from teachers and other students to improve their writing
- Publish written work, in handwritten form or in digital form.

Written Language - Reading - Grade 2

Word Recognition and Vocabulary Building

- Read an increasing number of sight words including some unit of inquiry words and technical language words - 1 I
- Read Grade 2 high frequency words independently

Decoding

- Use a variety of strategies to decode unknown words, i.e. picture clues, re-reading, reading on, chunking, prior knowledge, sight words, comprehension, syllables, self-correction and knowledge of common letter patterns - 1 SA
- Understand sound-symbol relationships and apply reliable phonetic strategies when decoding print - 1 SA

Fluency

- Reflect meaning with the voice through pause, stress, intonation and phrasing

Organizational Features

- Identify and explain the basic structure of a story - beginning, middle and end; may use storyboards or comic strips to communicate elements
- Recognize and use the different parts of a book, for example, title page, contents, index - 1 I

Text Types

- Realize that there is a difference between fiction and non-fiction and use books for particular purposes, with teacher guidance
- Demonstrates an awareness of different genres: biographies, narratives, information, procedures, poetry

Read for a Variety of Purposes

- Develop personal preferences, selecting books for pleasure and information
- Choose texts appropriate to reading levels - 1 SA
- Participate in shared reading, posing and responding to questions and joining in the refrains (repeated parts) - 1 SA
- Participate in guided reading situations, observing and applying reading behaviors and interacting effectively with the group - 1 SA
- Begin to access information from a variety of texts both in print and online, for example, newspapers, magazine journals, comics, graphic books, e-books, blogs, wikis
- Begin to recognize that ideas come from different types of media
- Participate in class or group author studies, appreciating what it means to be an author

Retelling

- Provide information relating to events in a story in sequence including setting and characters
- Retell the key information from a grade appropriate non-fiction text - 1 I

Text Interpretation

- Participate in collaborative learning experiences, acknowledging that people see things differently and are entitled to express their point of view

Oral Language - Listening - Grade 2

Listening

- Obtain information from more complex spoken texts
- Follow multi-step directions
- Listen to a variety of oral presentations including stories, poems, rhymes and reports and respond
- Listen attentively and speak appropriately in small and large group interactions
- Demonstrate active listening by having eye contact and using appropriate body language

Oral Language - Speaking - Grade 2

Small group and public speaking

- Realize that word order can change from one language to another
- Recognize patterns in language of instruction and use increasingly accurate grammar
- Present ideas and opinions verbally
- Generate concept based questions to generate inquiry
- Dramatize familiar stories and poems with use of toys, props, puppets and plays
- Talk about and explain the process for stories, writing and models they have created
- Begin to use tone, voice level, and intonation to convey message
- Paraphrase simple oral and written information in a logical sequence
- Participate in large group presentations with help of visual aides
- Understand and use specific vocabulary to suit different purposes
- Can make connections of unknown words to other words to discover meaning

Visual Language - Viewing and Presenting - Grade 2

Building Awareness and Viewing

- Discuss their own ideas in response to visual images and recognize different reactions
- Begin recognize and name familiar visual texts, for example, labels, signs, ICT iconography
- View different versions of the same story and notice the effectiveness of the different ways of telling the same story, for example, the picture book version and the film/movie version of a story
- Observe visual images to analyze information

Presenting

- Begin to use actions and body language to reinforce and add meaning to oral presentations
- Begin to select and use suitable shapes, colors, symbols and layout for presentations; practise and develop fonts and styles
- Recognize the use and organization of visual effects to create a particular impact, for example, dominant images show what is important in a story

Comprehension Strategies - Grade 2

Monitoring Comprehension

- Re-read to clarify meaning; ask and use textual and additional information to find answers within a text; identify unknown words and ask to find out meaning

Determining Important Ideas

- Explain the basic structure of a story - beginning, middle and end
- Identify the main character, relevance of setting, main idea, problems/conflicts and solutions
- With support, identify text features such as headings, index, glossary, table of contents, illustrations and captions

Making Connections

- Activate prior knowledge before, during and after reading
- Make text-to-self, text-to-text and text-to-world connections during independent reading

Visualizing

- Create mental images when reading or listening to stories

Summarizing

- Retell a story in sequence, from independent reading, identifying main idea, problems, conflicts and solutions
- Recall facts from nonfiction texts, identifying relevant information.

Inferring

- Using appropriately leveled texts, make predictions about a story, based on their own knowledge and experience; revise or confirm predictions as the story progresses.
- Begin to make inferences, using character, setting, plot and information within the text.

Analyzing/ Evaluating

- Demonstrate an awareness of different genres.
- Recognize there is a difference between fiction and nonfiction and use books for a particular purpose with teacher guidance.
- Begin to recognize the author's purpose, for example: to inform, entertain, instruct.
- Begin to identify fact and opinions in a text.

Written Language - Writing - Grade 3

Content and Traits - Ideas

- Communicate main ideas clearly.
- Select supporting details to achieve desired effects include the features of character, setting and plot.
- Use a range of strategies to record ideas of increasing complexity.
- Write for a range of purposes, both creative and informative, and begin using different types of structures and styles according to the purpose of the writing
- Write a story with a clear and developed beginning, middle and end.
- Include details of characters, setting and plot

Content and Traits - Organization

-
- Organize ideas into paragraphs - begin to write clear main ideas with support details in a logical sequence
 - In a paragraph from a non-fiction text, begin to summarise the key points.

Content and Traits - Voice

- Begins to write in an individual, creative and expressive style while experimenting with writing from an alternative view

Content and Traits - Word Choice

- Select vocabulary to achieve desired effects
- Begin to use additional figurative language: imagery, simile, metaphors
- Use a dictionary and a thesaurus to check accuracy, broaden vocabulary and enrich writing
- Select vocabulary appropriate to content, audience and purpose

Content and Traits - Sentence Fluency

- Write compound sentences using a range of sentence starters and connectives

Content and Traits - Conventions (Spelling, Punctuation, Grammar, Handwriting, Keyboarding)

- Competently connects written codes with the sounds of spoken language and reflect this understanding using common spelling patterns, letter knowledge and environmental print.
- Spell grade appropriate high frequency words correctly
- Use capitalisation correctly at the beginning of sentences, proper nouns and titles.
- Apply punctuation consistently (full stops, apostrophes, commas, exclamation marks, question marks and quotation marks).
- Develop an awareness of other uses for commas.
- Identify and use common nouns, proper nouns, verbs, pronouns, prepositions, adjectives, synonyms, antonyms and adverbs.
- Use the correct tense for the writing genre with subject-verb agreement
- Consistently form letters including appropriate size, spacing and speed.

Process (Pre-writing, Drafting, Revising, Editing, Publishing)

- Reread, edit and revise to improve their writing.
- Use a graphic organizer for writing familiar genres.
- Use feedback from teachers and other students to improve their writing
- Publish written work effectively in handwritten or digital form.

Written Language - Reading - Grade 3

Word Recognition and Vocabulary Building

- Recognize words using contextual cues and sight vocabulary
- Read Grade 3 high frequency words independently

Decoding

- Use a variety of strategies to decode unknown words, i.e. picture clues, re-reading, reading on, chunking, prior knowledge, sight words, comprehension, syllables, self-correction and knowledge of complex letter patterns
- Recognize unfamiliar words using a variety of decoding skills

Fluency

- Reflect meaning with the voice through pause, stress, intonation and phrasing

Organizational Features

- Understand and respond to the ideas, feelings and attitudes expressed in various texts, showing empathy for characters
- Understand that stories have a plot; identify the main idea; discuss and outline the sequence of events leading to the final outcome
- Discuss personality and behaviour of storybook characters, commenting on reasons they they might react in particular ways
- Use the features of non-fiction texts to find specific information, illustrations, graphics, contents, index and headings

Text Types

- Distinguish between fiction and non-fiction and select books appropriate to specific purposes
- Demonstrates an awareness of different genres: narratives, timetables, fact and opinion, letters, advertisements, articles and persuasive texts

Read for a Variety of Purposes

- Read favorite authors and genres and explore other text types
- Read a variety of books for pleasure, instruction and information
- Participate in guided reading situations, independently applying reading behaviors and interacting effectively with the group
- Begin to access information from a variety of texts both in print and online, for example, newspapers, magazines, journals, comics, graphic books, e-books, blogs, wikis
- Reflect regularly on reading and set future goals
- Begin to know how to skim and scan texts to decide whether they will be useful, before attempting to read in detail
- Begin to identify relevant, reliable and useful information and decide on appropriate ways to use it; Engage in academic honesty
- Participate in class, group or individual author studies, gaining understanding of the work and style of a particular author and appreciating what it means to be an author

Retelling

- Provide information relating to events in a story and can give reasons why things happen or why characters change
- Retell the key information from grade appropriate non-fiction text

Text Interpretation

- Begin to identify reasons why a text may be interpreted differently by different readers, i.e. personal background of reader, author's perspective, socio-cultural background

Oral Language - Listening - Grade 3

Listening

- Obtain and validate information from complex spoken texts
- Follow multi-step directions accurately
- Listen appreciatively and responsively, presenting their own point of view and respect the views of others
- Listen for a specific purpose in a variety of situations with increasing confidence
- Demonstrate active listening by asking questions, having eye contact and using appropriate body language

Oral Language - Speaking - Grade 3

Small group and public speaking

- Begin to appreciate that language is not always used literally; understand and use the figurative language of their own culture
- Realize that grammatical structures can be irregular and begin to use them correctly
- Begin to develop, generate, and present ideas and opinions verbally
- Use concept based questions to generate inquiry
- Dramatize nonfiction and fiction with use of props, readers theatre and plays
- Talk about and make connections between stories, writing, and models they have created
- Use tone, voice level, and intonation to convey message
- Paraphrase the important details or main idea from oral and written information
- Participate in large group presentations with visual aides and memorized scripts
- Use multimedia tools to enhance presentations
- Use a range of specific vocabulary in different situations, indicating an awareness that language is influenced by purpose, audience and context
- Infer meaning of unknown spoken words by how they are used in conversation or discussion

Visual Language - Viewing and Presenting - Grade 3

Building Awareness and Viewing

- Discuss their own ideas in response to visual images and respect different points of view
- Recognize and name familiar visual texts, for example, advertising, logos, labels, signs, ICT iconography
- View different versions of the same story and notice the effectiveness of the different ways of telling the same story, for example, the picture book version and the film/movie version of a story
- Observe visual images to compare and contrast visual information

Presenting

- Use actions and body language to reinforce and add meaning to oral presentations
- Select and use suitable shapes, colours, symbols and layout for presentations; practise and develop fonts and styles
- Use and organize visual effects to create a particular impact

Comprehension Strategies - Grade 3

Monitoring Comprehension

- Recognize misunderstanding and attempt to correct comprehension using strategies (re-reading, asking clarifying questions, referencing additional information within a text, reflecting, understanding vocabulary)

Determining Important Ideas

- Discuss and outline the sequence of events leading to the final outcome
- Identify the roles of characters in the story; identify problem and resolution in a story and identify alternative solutions to the problem
- Independently use text features such as headings, index, glossary, table of contents, illustrations and captions
- Understand that stories have a plot
- Provide information relating to events in a story and give reasons why things happen or why characters change
- Identify text boxes, subheadings, labels, maps
- Distinguish bold text as relevant
- Begin to identify relevant, reliable and useful information and decide on appropriate ways to use it

Making Connections

- Activate prior knowledge before, during and after reading
- Make text-to-self, text-to-text and text-to-world connections during independent reading

Visualizing

- Create mental images when reading or listening to stories

Questioning

- Identify types of questions that help understanding (textual, look up 7 keys to comprehension)

Summarizing

- Retell a story using main idea and relevant details about characters, setting and plot.
- Identify main topic from a multi-paragraph text as well as the focus of specific paragraphs.

Inferring

- Using appropriately leveled texts make and justify inferences using character, setting, plot and information within the text. Revise or confirm predictions as the story progresses.
- Begin to make inferences based on alterations to character, setting, plot and information within a text.

Analyzing/ Evaluating

- Distinguish differences between fiction and nonfiction and select books for specific purposes.
- Recognise the author's purpose, for example, to inform, entertain, persuade, instruct.
- Identify and begin to distinguish facts and opinions within a text.
- Begin to identify reasons why a text may be interpreted differently by different readers (personal background)
- Understand and respond to the ideas, feelings and attitudes expressed in various texts.

Written Language - Writing - Grade 4

Content and Traits - Ideas

- Begin to write with a clear and consistent focus on the main idea
- Use a range of strategies to record words/ideas of increasing complexity
- Write for a range of purposes, both creative and informative, using different types of structures and styles according to the purpose of the writing
- Write a clear and engaging story.
- Write with clear character, setting and plot development beginning to create mood

Content and Traits - Organization

- Begin to use appropriate paragraphing to organize ideas; write main idea with supporting details logically in a paragraph
- In non-fiction texts, begin to summarise the key points

Content and Traits - Voice

- Write independently and with confidence demonstrating a personal voice as a writer

Content and Traits - Word Choice

- Select vocabulary and supporting details to achieve desired effects
- Continue to use figurative language including imagery, simile, metaphors, personification, idioms
- Use a dictionary and thesaurus to check accuracy, broaden vocabulary and enrich their writing
- Select content and purpose specific vocabulary including technical words to add meaning

Content and Traits - Sentence Fluency

- Begin to use complex sentences
- Vary sentence structure and length so writing flows easily

Content and Traits - Conventions (Spelling, Punctuation, Grammar, Handwriting, Keyboarding)

- Competently connects written codes with the sounds of spoken language and reflect this understanding using common spelling patterns, letter knowledge and environmental print.
- Applies capitalisation consistently.
- Uses taught punctuation
- Develop an awareness of quotation marks when referencing.
- Use common nouns, proper nouns, verbs, pronouns, prepositions, adjectives, synonyms, antonyms and adverbs.
- Identify and uses affixes (prefixes and suffixes).
- Consistently use the correct tense for the writing genre with subject-verb agreement.
- Consistently form letters using appropriate size, spacing and speed.

Process (Pre-writing, Drafting, Revising, Editing, Publishing)

- Independently reread, edit and revise, improve their writing,
- Choose an appropriate graphic organiser from a range provided by the teacher.
- Work cooperatively with a partner to discuss and improve each other’s work, taking the roles of authors and editors
- Writers ask questions of themselves and identify ways to improve their writing, for example, “Is this what I meant to say?”, “Is it interesting/relevant?”
- Independently choose to publish written work in handwritten form or in digital form
- Begins to cite sources

Written Language - Reading - Grade 4

Word Recognition and Vocabulary Building

- Skim and scan for relevant information locating key words
- Begin to understand derivational words from other languages

Decoding

- Recognizes new words by using a variety of decoding skills including base words, prefixes and suffixes

Fluency

- Read texts with accuracy, intonation and minimal hesitation

Organizational Features

- Appreciate that writers plan and structure their stories to achieve particular effects
- Identify features that can be replicated when planning their own stories
- Use text organizers to locate information for a specific purpose

Text Types

- Demonstrate understanding of different genres including myths
- Identify genre and explain elements and literary forms that are associated with different genres: persuasive texts, procedural texts, narratives, biographies, advertisements, letters, myths, legends, poetry, reports
- Identify genre and explain elements and literary forms that are associated with different genres: persuasive texts, procedural texts, narratives, biographies, advertisements, letters, myths, legends, poetry, recounts, reports

Read for a Variety of Purposes

- Reflects on reading habits and preferences
- Read a wide range of texts confidently, independently and with understanding
- Participate in collaborative learning considering multiple perspectives in guided reading/literature circle situations
- Access information from a variety of texts both in print and online, for example, newspapers, magazines, journals, comics, graphic books, e-books, blogs, wikis
- Plans personal reading goals
- Know how to skim and scan texts to decide whether they will be useful, before attempting to read in detail
- Use a range of resources to find information and support their inquiries, citing their resources
- Participate in class, group or individual author studies, gaining in-depth understanding of the work and style of a particular author and appreciating what it means to be an author

Retelling

- Identify plot, characterisation and voice of the story
- Understands and responds to the ideas and information in texts

Text Interpretation

- Identify reasons why a text may be interpreted differently by different readers, i.e. personal background of reader, author's perspective, socio-cultural background

Oral Language - Listening - Grade 4

Listening

- Obtain and validate information from multiple complex spoken texts
- Evaluate and follow multi-step directions accurately
- Listen actively to a variety of discussions including: conversations, debates and group presentations
- Listen appropriately to instructions, questions and explanations
- Demonstrate active listening by remembering what was said and using it in conversations / discussions.

Oral Language - Speaking - Grade 4

Small group and public speaking

- Appreciate that language is not always used literally; understand and use the figurative language of their own culture
- Use grammatical structures correctly most of the time
- Develop, generate, and present ideas and opinions
- Independently use complex concept based questions to generate inquiry
- Dramatize nonfiction and fiction with use of props, readers theatre and plays
- Compare and contrast stories, writing, and models they have created verbally
- Use tone, voice level, and intonation to change message
- Paraphrase and draw conclusions from oral and written information with justification
- Participate in large group presentations with memorized scripts
- Use multimedia tools to enhance presentation
- Use figurative language such as simile, personification and metaphor that is influenced by purpose, audience, and context
- Begin to use more than one strategy to find the meaning of unknown spoken words

Visual Language - Viewing and Presenting - Grade 4

Building Awareness and Viewing

- Realize that visual presentations have been created to reach out to a particular audience and influence the audience in some way; discuss the effects used and how they might influence the audience.
- Recognize and name familiar visual texts and explain why they are or are not effective, for example, advertising, logos, labels, signs, billboards
- Notice how relevant personal experiences can add to the meaning of a selected film/movie; write and illustrate a personal response
- Observe visual images to make connections to other information

Presenting

- Show how body language, for example, facial expression, gesture and movement, posture and orientation, eye contact and touch, can be used to achieve effects and influence meaning
- Design posters and charts, using shapes, colours, symbols, layout and fonts, to achieve particular effects; explain how the desired effect is achieved
- Use and organize multiple, contrasting visual effects to create a particular impact

Comprehension Strategies - Grade 4

Monitoring Comprehension

- Reflect on understanding, using strategies (re-reading, asking clarifying questions, referencing additional information within a text, reflecting, understanding vocabulary) to improve comprehension

Determining Important Ideas

- Identify direct and indirect characterization and voice of the story
- Use text features to independently locate information for a specific purpose
- Independently identify relevant, reliable and useful information and decide on appropriate ways to use it

Making Connections

- Can justify connections during reading and start to explain how this enhances comprehension

Visualizing

- Create mental images when reading or listening to stories
- Understand that authors use words and literary devices to evoke mental images

Questioning

- Ask open/fat questions about a text

Summarizing

- Use relevant information to summarize a story.
- Identify simple themes in stories.
- Identify relationships between ideas in a text, using language that pertains to time, sequence, and cause/effect.

Inferring

- Using increasingly complex texts, make and justify inferences.
- Begin to connect, sympathize and empathize with characters in fictional texts.

Analyzing/ Evaluating

-
- Identify genre and explain elements and literary forms that are associated with different genres.
 - Distinguish facts and opinions within a text and begin to reach their own conclusions about what represents valid information.
 - Identify reasons why a text may be interpreted differently by different readers, i.e. personal background of reader, author's perspective, socio cultural background.
 - Understands and responds to ideas and information in texts.
 - Identify and describe elements of a story: plot, setting, characters, theme, voice and begin to explain how they contribute to its effectiveness.
 - Recognize cause and effect of events and problems in stories.
 - Begin to recognize and understand figurative language (similes, metaphors, for example)
 - Appreciate that authors plan and structure their stories to achieve particular effects.

Written Language - Writing Grade 5

Content and Traits - Ideas

- Write with a clear and consistent focus on the main idea
- Connect all details to the main idea, sequences logically and gives clues as to what is coming.
- Use a variety of strategies and genres for collecting and organising ideas based on audience and purpose.
- Write using a range of text types in order to communicate effectively, for example, narrative, instructional, persuasive
- Write engaging stories clearly including plot and problem
- Write with detailed character, setting and plot development creating mood

Content and Traits - Organization

- Use appropriate paragraphing to organize ideas; include a developed logical sequence
- In non-fiction texts, summarise the key points

Content and Traits - Voice

- Write independently and with confidence showing development of own voice and style

Content and Traits - Word Choice

- Use a range of vocabulary and relevant supporting details to convey meaning and create atmosphere and mood; Use a variety of descriptive vocabulary words.
- Use figurative language to enhance writing, for example, similes, metaphors, idioms, alliteration
- Use a dictionary, thesaurus, spell checker confidently and effectively to check accuracy, broaden vocabulary and enrich their writing
- Select content and purpose specific vocabulary to effectively convey meaning and create atmosphere and mood

Content and Traits - Sentence Fluency

- Use complex sentences composed of dependent and independent clauses

Content and Traits - Conventions (Spelling, Punctuation, Grammar, Handwriting, Keyboarding)

-
- Competently connects written codes with the sounds of spoken language and reflect this understanding using common spelling patterns, letter knowledge and environmental print.
 - Applies capitalisation consistently including referencing
 - Consistently use punctuation, including quotation marks when referencing
 - Confidently use common nouns, proper nouns, verbs, pronouns, prepositions, adjectives, synonyms, antonyms and adverbs.
 - Identify and use affixes (prefixes and suffixes).
 - Consistently use the correct tense for the writing genre with subject-verb agreement.
 - Consistently form letters using appropriate size, spacing and speed.

Process (Pre-writing, Drafting, Revising, Editing, Publishing)

- Independently reread, edit and revise, improve their writing,
- Independently choose an appropriate graphic organizers to plan writing.
- Work cooperatively with a partner to discuss and improve each other's work, taking the roles of authors and editors
- Writes from a personal or alternative perspective, including thoughts and feelings - edits writing.
- Independently choose a variety of appropriate publishing formats either written or digital
- Cite sources using MLA format

Written Language - Reading - Grade 5

Word Recognition and Vocabulary Building

- Skim and scan for relevant information locating key words
- Apply knowledge of derivational words from other languages to decode

Decoding

- Reads and interprets new words by using appropriate strategies including use of references

Fluency

- Self-corrects intonation, phrasing and pausing while reading aloud

Organizational Features

- Identify and describe elements of a story (plot, setting, characters, theme) and explain how they contribute to its effectiveness
- Use text organizers to locate information for a specific purpose

Text Types

- Appreciate structural and stylistic differences between fiction and non-fiction; show understanding of this distinction when structuring their own writing
- Demonstrates understanding of different genres including historical fiction, fantasy, mystery by making comparisons

Read for a Variety of Purposes

- Critically evaluates reading habits and preferences
- Participate in collaborative learning, in guided reading/literature circle situations, considering multiple perspectives and working with peers to co-construct new understanding

-
- Locate, organize and synthesize information from a variety of sources including the library/ media center, the internet, people in the school, family, the immediate community or the global community
 - Plan and implement personal reading goals
 - Consistently and confidently use a range of resources to find information and support their inquiries, correctly citing resources using MLA? format
 - Appreciate authors' use of language and begin to interpret meaning beyond the literal

Retelling

- Read and demonstrate comprehension of texts using both explicit and implicit information to achieve a given purpose
- Make informed judgements about the author's purpose

Text Interpretation

- Discuss the reasons why a text may be interpreted differently by different readers, i.e. personal background of reader, author's perspective, socio-cultural background
- Use a range of strategies to solve comprehension problems and deepen their understanding of a text
- Begin to distinguish between fact and opinion, and reach their own conclusions about what represents valid information

Oral Language - Listening - Grade 5

Listening

- Obtain, validate, and consolidate information from multiple complex spoken texts
- Evaluate and follow multi-step directions accurately
- Listen actively to a variety of discussions including: conversations, debates and group presentations
- Listen and evaluate oral presentations
- Demonstrate active listening by asking questions, having eye contact and taking notes for a variety of purposes

Oral Language - Speaking - Grade 5

Small group and public speaking

- Appreciate that people speak and respond according to personal and cultural perspectives
- Use standard grammatical structures competently in appropriate situations
- Generate, filter, and present ideas and opinions in all subject areas
- Use complex concept based questions to create deeper and more specific inquiry
- Dramatize nonfiction and fiction with use of props, readers theatre and plays
- Evaluate stories, writing, and models they have created verbally
- Use tone, voice level and intonation to enhance message
- Paraphrase complex oral and written information in logically structured statements
- Participate in large group presentations, memorized or impromptu
- Use multimedia tools to enhance presentations

-
- Use an increasing vocabulary and more complex sentence structures with a high level of specificity
 - Use a variety of strategies to find the meaning of unknown spoken words.

Visual Language - Viewing and Presenting - Grade 5

Building Awareness and Viewing

- Realize that individuals interpret visual information according to their personal experiences and different perspectives
- Recognize and name familiar visual texts and explain why they are or are not effective, for example, advertising, logos, labels, signs, billboards
- Identify the intended audience and purpose of a visual presentation; identify overt and implied messages
- Observe visual images to determine implied meaning

Presenting

- Show how body language, for example, facial expression, gesture and movement, posture and orientation, eye contact and touch, can be used to achieve effects and influence meaning
- Apply knowledge of presentation techniques in original and innovative ways; explain their own ideas for achieving desired effects
- Use and organize multiple, contrasting visual effects to create a particular response from audience

Comprehension Strategies - Grade 5

Monitoring Comprehension

- Independently use and explain strategies (re-reading, asking clarifying questions, referencing additional information within a text, reflecting, understanding vocabulary) to check and correct comprehension

Determining Important Ideas

- Differentiate between key ideas and less important ideas
- Use text features to help make decisions about what is important

Making Connections

- Able to evaluate and explain why making connections during reading is important

Visualizing

- Create mental images when reading or listening to stories

Questioning

- In independent groups, able to direct discussions using open/fat questions

Summarizing

- Use relevant information to concisely summarize a story.

-
- Able to identify themes in stories, explain how the theme is conveyed through key ideas in the text.
 - Summarize and justify the relationship between ideas in a text.

Inferring

- Using increasingly complex texts, make and justify inferences.
- Connect, sympathize and empathize with characters in fictional texts.
- Read and demonstrate comprehension of texts using explicit and implicit information to achieve a given purpose.

Analyzing/Evaluating

- Identify, explain and compare elements and literary forms that are associated with different genres.
- Make informed judgments about the author's purpose.
- Distinguish between fact and opinion and reach their own conclusions about what represents valid information.
- Discuss reasons why a text may be interpreted differently by different readers (i.e. personal background, author's perspective, socio-cultural background)
- Identify and describe elements of a story- plot, setting, characters, theme- and explain how they contribute the effectiveness of the text.
- Recognize and understand figurative language (similes, metaphors, for example)
- Appreciate structural and stylistic differences between genres. Show understanding of these distinctions when structuring their own writing.
- Appreciate author's use of language and begin to interpret meaning beyond the literal.



Reading Literature - Grade 6

Key Ideas & Details
RL.1 Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
<ul style="list-style-type: none"> • RL.1a. Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
RL.2 Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
<ul style="list-style-type: none"> • RL.2a. Determine a theme or central idea of a text and how it is conveyed through particular details. b. Provide a summary of the text distinct from personal opinions or judgments.
Craft & Structure
RL.4 Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.
<ul style="list-style-type: none"> • RL.4a. Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings. • RL.4b. Analyze the impact of a specific word choice on meaning and tone. "
RL.5 Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
<ul style="list-style-type: none"> • RL.5a. Analyze how a particular sentence, chapter, scene, or stanza fits into the overall structure of a text and contributes to the development of the theme, setting, or plot.
RL.6 Assess how point of view or purpose shapes the content and style of a text.
<ul style="list-style-type: none"> • RL.5a. Explain how an author develops the point of view of the narrator or speaker in a text.

Reading Informational Text - Grade 6

Key Ideas & Details
RI.1 Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
<ul style="list-style-type: none"> • RI.1a. Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
RI.2 Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
<ul style="list-style-type: none"> • RI.2a. Determine a central idea of a text and how it is conveyed through particular details. b. Provide a summary of the text distinct from personal opinions or judgments.
RI.3 Analyze how and why individuals, events, and ideas develop and interact over the course of a text.
<ul style="list-style-type: none"> • RI.3a. Analyze in detail how a key individual, event, or idea is introduced, illustrated, and elaborated in a text (e.g., through examples or anecdotes).
Craft & Structure
RI.4 Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.
<ul style="list-style-type: none"> • RI.4a. Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings.

	RI.5 Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
	<ul style="list-style-type: none"> RI.5a. Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of the ideas.
	RI.6 Assess how point of view or purpose shapes the content and style of a text.
	<ul style="list-style-type: none"> RI.6a. Determine an author’s point of view or purpose in a text and explain how it is conveyed in the text.
	Integration of Knowledge & Ideas
	RI.7 Integrate and evaluate content presented in diverse formats and media, including print and digital resources.
	<ul style="list-style-type: none"> RI.7a. Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.
	RI.8 Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.
	<ul style="list-style-type: none"> RI.8a. Delineate and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not.
	RI.9 Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.
	<ul style="list-style-type: none"> RI.9a. Compare and contrast one author’s presentation of events with that of another (e.g., a memoir written by and a biography on the same person).
Writing - Grade 6	
	Text Type & Purpose
	W.1 Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
	<ul style="list-style-type: none"> W.1a. Introduce claim(s) and organize the reasons and evidence clearly. W.1b. Support claim(s) with clear reasons and relevant evidence, using credible sources and demonstrating an understanding of the topic or text. W.1c. Use words, phrases, and clauses to clarify the relationships among claim(s) and reasons. W.1d. Establish and maintain a formal style. W.1e. Provide a concluding statement or section that follows from the argument presented.
	W.3 Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences
	<ul style="list-style-type: none"> W.3a. Engage and orient the reader by establishing a context and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically W.3b. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters W.3c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another W.3d. Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events
	Production & Distribution of Writing
	W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
	<ul style="list-style-type: none"> W.4a. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
Listening & Speaking - Grade 6	

<p>Comprehension & Collaboration</p> <p>LS.1 Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.</p>
<ul style="list-style-type: none"> • LS.1a. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher- led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.
<p>LS.3 Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric.</p>
<ul style="list-style-type: none"> • LS.3a. Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not.
<p>Presentation of Knowledge & Ideas</p> <p>LS.4 Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.</p>
<ul style="list-style-type: none"> • LS.4a. Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.
<p>Language Foundation - Grade 6</p>
<p>LF.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p>
<ul style="list-style-type: none"> • LF.1a. Ensure that pronouns are in the proper case (subjective, objective, possessive). • LF.1b. Use intensive pronouns (e.g., myself, ourselves). • LF.1c. Recognize and correct inappropriate shifts in pronoun number and person. • LF.1d. Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents). • LF.1e. Recognize variations from standard English in their own and others' writing and speaking, and identify and use strategies to improve expression in conventional language."
<p>LF.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p>
<ul style="list-style-type: none"> • LF.2a. Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements. • LF.2b. Spell correctly.
<p>LF.3 Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.</p>
<ul style="list-style-type: none"> • LF.3a. Vary sentence patterns for meaning, reader/listener interest and style. • LF.3b. Maintain consistency in style and tone.
<p>LF.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.</p>
<ul style="list-style-type: none"> • LF.4a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. • LF.4b. Use common, grade- appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., audience, auditory, audible).
<p>LF.5 Demonstrate understanding of word relationships and nuances in word meanings.</p>

	<ul style="list-style-type: none"> • LF.5a. Interpret figures of speech (e.g., personification) in context. • LF.5b. Use the relationship between particular words (e.g., cause/effect, part/whole, item/category) to better understand each of the words. • LF.5c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., stingy, scrimping, economical, unwasteful, thrifty)."
	<p>LF.6 Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.</p>
	<ul style="list-style-type: none"> • LF.6a. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Reading Literature - Grade 7

Key Ideas & Details

RL.1 Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

- RL.1a. Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

RL.2 Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.

- RL.2a. Determine a theme or central idea of a text and analyze its development over the course of the text. b. Provide an objective summary of the text.

Craft & Structure

RL.4 Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.

- RL.4a. Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings.
- RL.4b. Analyze the impact of rhymes and other repetitions of sounds (e.g., alliteration) on a specific verse or stanza of a poem or section of a story or drama. "

RL.5 Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.

- RL.5a. Analyze how a drama's or poem's form or structure (e.g., soliloquy, sonnet) contributes to its meaning.

RL.6 Assess how point of view or purpose shapes the content and style of a text.

- RL.6a. Analyze how an author develops and contrasts the points of view of different characters or narrators in a text.

Reading Informational Text - Grade 7

Key Ideas & Details

RI.1 Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

-
- RI.1a. Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

RI.2 Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.

- RI.2a. Determine a central idea of a text and analyze its development over the course of the text.
b. Provide an objective summary of the text.

RI.3 Analyze how and why individuals, events, and ideas develop and interact over the course of a text.

- RI.3a. Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events).

Craft & Structure

RI.4 Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.

- RI.4a. Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of a specific word choice on meaning and tone.

RI.5 Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.

- RI.5a. Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to the development of the ideas.

RI.6 Assess how point of view or purpose shapes the content and style of a text.

- RI.6a. Determine an author's point of view or purpose in a text and analyze how the author distinguishes his or her position from that of others.

Integration of Knowledge & Ideas

RI.7 Integrate and evaluate content presented in diverse formats and media, including print and digital resources.

- RI.7a. Compare and contrast a text to an audio, video, or multimedia version of the text, analyzing each medium's portrayal of the subject (e.g., how the delivery of a speech affects the impact of the words).

RI.8 Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.

- RI.8a. Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims.

RI.9 Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.

- RI.9a. Analyze how two or more authors writing about the same topic shape their presentations of key information by emphasizing different evidence or advancing different interpretations of facts.

Writing - Grade 7

Text Type & Purpose

W.1 Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.

- W.1a. Introduce claim(s), acknowledge alternate or opposing claims, and organize the reasons and evidence logically.
- W.1b. Support claim(s) with relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text.
- W.1c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons, and evidence.
- W.1d. Establish and maintain a formal style.
- W.1e. Provide a concluding statement or section that follows from and supports the argument presented.

W.3 Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.

- W.3a. Engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically.
- W.3b. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters.
- W.3c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another.
- W.3d. Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events.

Production & Distribution of Writing

W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

- W.4a. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)

Listening & Speaking - Grade 7

Comprehension & Collaboration

LS.1 Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.

- LS.1a. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly. [Show details](#)

LS.3 Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric.

- LS.3a. Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence.

Presentation of Knowledge & Ideas

LS.4 Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.

- LS.4a. Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.

Language Foundation - Grade 7

LF.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

- LF.1a. Explain the function of phrases and clauses in general and their function in specific sentences.
- LF.1b. Choose among simple, compound, complex, and compound-complex sentences to signal differing relationships among ideas.
- LF.1c. Place phrases and clauses within a sentence, recognizing and correcting misplaced and dangling modifiers.

LF.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

- LF.2a. Use a comma to separate coordinate adjectives (e.g., It was a fascinating, enjoyable movie but not He wore an old [,] green shirt).
- LF.2b. Spell correctly.

LF.3 Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.

- LF.3a. Choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy

LF.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.

- LF.4a. Use context (e.g., the overall meaning of a sentence or paragraph; a word’s position or function in a sentence) as a clue to the meaning of a word or phrase.
- LF.4b. Use common, grade- appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., belligerent, bellicose, rebel).

LF.5 Demonstrate understanding of word relationships and nuances in word meanings.

- LF.5a. Interpret figures of speech (e.g., literary, religious works, and mythological allusions) in context.
- LF.5b. Use the relationship between particular words (e.g., synonym/antonym, analogy) to better understand each of the words.
- LF.5c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., refined, respectful, polite, diplomatic, condescending).

LF.6 Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

- LF.6a. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Reading Literature - Grade 8

Key Ideas & Details

RL.1 Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

- RL.1a. Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.

RL.2 Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.

-
- RL.2a. Determine a theme or central idea of a text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot. b. Provide an objective summary of the text.

Craft & Structure

RL.4 Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.

- RL.4a. Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings.
- RL.4b. Analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts. "

RL.5 Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.

- RL.5a. Compare and contrast the structure of two or more texts and analyze how the differing structure of each text contributes to its meaning and style.

RL.6 Assess how point of view or purpose shapes the content and style of a text.

- RL.6a. Analyze how differences in the points of view of the characters and the audience or reader (e.g., created through the use of dramatic irony) create such effects as suspense or humor.

Reading Informational Text - Grade 8

Key Ideas & Details

RI.1 Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

- RI.1a. Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.

RI.2 Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.

- RI.2a. Determine a central idea of a text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot. b. Provide an objective summary of the text.

RI.3 Analyze how and why individuals, events, and ideas develop and interact over the course of a text.

- RI.3a. Analyze how a text makes connections among and distinctions between individuals, ideas, or events (e.g., through comparisons, analogies, or categories).

Craft & Structure

RI.4 Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.

- RI.4a. Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.

RI.5 Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.

- RI.5a. Analyze in detail the structure of a specific paragraph in a text, including the role of particular sentences in developing and refining a key concept.

RI.6 Assess how point of view or purpose shapes the content and style of a text.

- RI.6a. Determine an author’s point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.

Integration of Knowledge & Ideas

RI.7 Integrate and evaluate content presented in diverse formats and media, including print and digital resources.

- RI.7a. Evaluate the advantages and disadvantages of using different mediums (e.g., print or digital text, video, multimedia) to present a particular topic or idea.

RI.8 Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.

- RI.8a. Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient. b. Recognize when irrelevant evidence is introduced.

RI.9 Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.

- RI.9a. Analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation.

Writing - Grade 8

Text Type & Purpose

W.1 Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.

- W.1a. Introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.
- W.1b. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text.
- W.1c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.
- W.1d. Establish and maintain a formal style.
- W.1e. Provide a concluding statement or section that follows from and supports the argument presented.

W.3 Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.

- W.3a. Engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically.
- W.3b. Use narrative techniques, such as dialogue, pacing, description, and reflection, to develop experiences, events, and/or characters.
- W.3c. Use a variety of transition words, phrases, and clauses to convey sequence, signal shifts from one time frame or setting to another, and show the relationships among experiences and events.
- W.3d. Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events.

Production & Distribution of Writing

W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

- W.4a. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)

Listening & Speaking - Grade 8

Comprehension & Collaboration

LS.1 Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.

- LS.1a. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher- led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly. Show details

LS.3 Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric.

- LS.3a. Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced.

Presentation of Knowledge & Ideas

LS.4 Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.

- LS.4a. Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume and clear pronunciation.

Language Foundation - Grade 8

LF.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

- LF.1a. Explain the function of verbals (gerunds, participles, infinitives) in general and their function in particular sentences.
- LF.1b. Form and use verbs in the active and passive voice.
- LF.1c. Form and use verbs in the indicative, imperative, interrogative, conditional, and subjunctive mood.
- LF.1d. Recognize and correct inappropriate shifts in verb voice and mood.*

LF.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

- LF.2a. Use punctuation (comma, ellipsis, dash) to indicate a pause or break.
- LF.2b. Use an ellipsis to indicate an omission.
- LF.2c. Spell correctly.

LF.3 Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.

- LF.3a. Use verbs in the active and passive voice and in the conditional and subjunctive mood to achieve particular effects (e.g., emphasizing the actor or the action; expressing uncertainty or describing a state contrary to fact)."

LF.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.

- LF.4a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.
- LF.4b. Use common, grade- appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., precede, recede, secede)."

LF.5 Demonstrate understanding of word relationships and nuances in word meanings.

- LF.5a. Interpret figures of speech (e.g. verbal irony, puns) in context.
- LF.5b. Use the relationship between particular words to better understand each of the words.
- LF.5c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., bullheaded, willful, firm, persistent, resolute)."

LF.6 Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

- LF.6a. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression."

Reading Literature - Grade 9-10

Key Ideas & Details

RL.1 Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

- RL.1a. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

RL.2 Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.

- RL.2a. Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details. b. Provide an objective summary of the text.

Craft & Structure

RL.4 Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.

- RL.4a. Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings
- RL.4b. Analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone)."

RL.5 Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.

- RL.5a. Analyze how an author's choices concerning how to structure a text, order events within it (e.g., parallel plots), and manipulate time (e.g., pacing, flashbacks) create such effects as mystery, tension, or surprise.

RL.6 Assess how point of view or purpose shapes the content and style of a text.

- RL.6a. Analyze a case in which grasping point of view requires distinguishing what is directly stated in a text from what is really meant (e.g., satire, sarcasm, irony, or understatement).

Reading Informational Text - Grade 9-10

Key Ideas & Details

RI.1 Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

<ul style="list-style-type: none"> RI.1a. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
<p>RI.2 Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.</p>
<ul style="list-style-type: none"> RI.2a. Determine a central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details. b. Provide an objective summary of the text.
<p>RI.3 Analyze how and why individuals, events, and ideas develop and interact over the course of a text.</p>
<ul style="list-style-type: none"> RI.3a. Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.
<p>Craft & Structure</p>
<p>RI.4 Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.</p>
<ul style="list-style-type: none"> RI.4a. Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper).
<p>RI.5 Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.</p>
<ul style="list-style-type: none"> RI.5a. Analyze in detail how an author’s ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of a text (e.g., a section or chapter).
<p>RI.6 Assess how point of view or purpose shapes the content and style of a text.</p>
<ul style="list-style-type: none"> RI.6a. Determine an author’s point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose
<p>Integration of Knowledge & Ideas</p>
<p>RI.7 Integrate and evaluate content presented in diverse formats and media, including print and digital resources.</p>
<ul style="list-style-type: none"> RI.7a. Analyze various accounts of a subject told in different mediums (e.g., a person’s life story in both print and multimedia), determining which details are emphasized in each account.
<p>RI.8 Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.</p>
<ul style="list-style-type: none"> RI.8a. Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient. b. Identify false statements and fallacious reasoning.
<p>Writing - Grades 9-10</p>
<p>Text Type & Purpose</p>
<p>W.1 Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.</p>

- W.1a. Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among claim(s), counterclaims, reasons, and evidence.
- W.1b. Develop claim(s) and counterclaims fairly, supplying evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience’s knowledge level and concerns.
- W.1c. Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.
- W.1d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.
- W.1e. Provide a concluding statement or section that follows from and supports the argument presented.

W.3 Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.

- W.3a. Engage and orient the reader by setting out a problem, situation, or observation, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events.
- W.3b. Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters.
- W.3c. Use a variety of techniques to sequence events so that they build on one another to create a coherent whole.
- W.3d. Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters.

Production & Distribution of Writing

W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

- W.4a. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)

Listening & Speaking - Grades 9-10

Comprehension & Collaboration

LS.1 Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others’ ideas and expressing their own clearly and persuasively.

- LS.1a. Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others’ ideas and expressing their own clearly and persuasively. Show details

LS.3 Evaluate a speaker’s point of view, reasoning, and use of evidence and rhetoric.

- LS.3a. Evaluate a speaker’s point of view, reasoning, and use of evidence and rhetoric, identifying any fallacious reasoning or exaggerated or distorted evidence.

Presentation of Knowledge & Ideas

LS.4 Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.

- LS.4a. Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task.

Language Foundation - Grades 9-10

LF.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

- LF.1a. Use parallel structure.
- LF.1b. Use various types of phrases (noun, verb, adjectival, adverbial, participial, prepositional, absolute) and clauses (independent, dependent; noun, relative, adverbial) to convey specific meanings and add variety and interest to writing or presentations."

LF.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

- LF.2a. Use a semicolon (and perhaps a conjunctive adverb) to link two or more closely related independent clauses.
- LF.2b. Use a colon to introduce a list or quotation.
- LF.2c. Spell correctly.

LF.3 Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.

- LF.3a. Write and edit work so that it conforms to the guidelines in a style manual (e.g., MLA Handbook, Turabian's Manual for Writers) appropriate for the discipline and writing type.

LF.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.

- LF.4a. Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.
- LF.4b. Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., analyze, analysis, analytical; advocate, advocacy)."

LF.5 Demonstrate understanding of word relationships and nuances in word meanings.

- LF.5a. Interpret figures of speech (e.g., euphemism, oxymoron) in context and analyze their role in the text.
- LF.5b. Analyze nuances in the meaning of words with similar denotations."

LF.6 Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

- LF.6a. Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Reading Literature - Grades 11-12

Key Ideas & Details

RL.1 Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

- RL.1a. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

RL.2 Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.

-
- RL.2a. Determine a central ideas of a text and analyze its development over the course of the text, including how it interacts to provide a complex analysis.

Craft & Structure

RL.4 Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.

- RL.4a. Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings
- RL.4b. Analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful."

RL.5 Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.

- RL.5a. Analyze how an author's choices concerning how to structure specific parts of a text (e.g., the choice of where to begin or end a story, the choice to provide a comedic or tragic resolution) contribute to its overall structure and meaning as well as its aesthetic impact.

RL.6 Assess how point of view or purpose shapes the content and style of a text.

- RL.6a. Analyze a case in which grasping point of view requires distinguishing what is directly stated in a text from what is really meant (e.g., satire, sarcasm, irony, or understatement).

Reading Informational Text - Grades 11-12

Key Ideas & Details

RI.1 Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

- a. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.

RI.2 Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.

- RI.2a. Determine two or more central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account.
- RI.2b. Provide an objective summary of the text.

RI.3 Analyze how and why individuals, events, and ideas develop and interact over the course of a text.

- RI.3a. Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text.

Craft & Structure

RI.4 Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.

- RI.4a. Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper).

RI.5 Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.

- RI.5a. Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging.

RI.6 Assess how point of view or purpose shapes the content and style of a text.

- RI.6a. Determine an author’s point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness, or beauty of the text.

Integration of Knowledge & Ideas

RI.7 Integrate and evaluate content presented in diverse formats and media, including print and digital resources.

- RI.7a. Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.

RI.8 Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.

- RI.8a. Delineate and evaluate the reasoning in seminal texts, including the application of constitutional principles and use of legal reasoning and the premises, purposes, and arguments in works of public advocacy

Writing - Grades 11-12

Text Type & Purpose

W.1 Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.

- W.1a. Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons and evidence.
- W.1b. Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience’s knowledge level, concerns, values, and possible biases.
- W.1c. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.
- W.1d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.
- W.1e. Provide a concluding statement or section that follows from and supports the argument presented.

W.3 Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.

- W.3a. Engage and orient the reader by setting out a problem, situation, or observation and its significance, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events.
- W.3b. Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters.
- W.3c. Use a variety of techniques to sequence events so that they build on one another to create a coherent whole and build toward a particular tone and outcome (e.g., a sense of mystery, suspense, growth, or resolution).
- W.3d. Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters.

Production & Distribution of Writing

W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

-
- W.4a. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)

Listening & Speaking - Grades 11-12

Comprehension & Collaboration

LS.1 Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.

- LS.1a. Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11–12 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively. [Show details](#)

LS.3 Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric.

- LS.3a. Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used.

Presentation of Knowledge & Ideas

LS.4 Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.

- LS.4a. Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.

Language Foundation - Grades 11-12

LF.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

- LF.1a. Apply the understanding that usage is a matter of convention, can change over time, and is sometimes contested.
- LF.1b. Resolve issues of complex or contested usage, consulting references (e.g., Merriam-Webster's Dictionary of English Usage, Garner's Modern American Usage) as needed."

LF.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

- LF.2a. Observe hyphenation conventions
- LF.2b. Spell correctly

LF.3 Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.

- LF.3a. Vary syntax for effect, consulting references (e.g., Tufte's Artful Sentences) for guidance as needed; apply an understanding of syntax to the study of complex texts when reading.

LF.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.

- LF.4a. Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.
- LF.4b. Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., conceive, conception, conceivable)."

LF.5 Demonstrate understanding of word relationships and nuances in word meanings.

- LF.5a. Interpret figures of speech (e.g., hyperbole, paradox) in context and analyze their role in the text.
- LF.5b. Analyze nuances in the meaning of words with similar denotations."

LF.6 Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

- LF.6a. Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Grades 1-10 Korean Language and Literature

Grade 1

Listening and Speaking

- 1-1-1. 인사한 경험을 떠올려 말할 수 있다.
- 1-1-2. 인사할 때의 마음가짐을 안다.
- 1-1-3. 알맞은 인사말을 안다.
- 1-1-4. 상황에 맞는 인사말을 할 수 있다.
- 1-1-5. 고운말로 인사할 수 있다.
- 1-1-6. 바르게 인사할 수 있다.

- 1-2-1. 바른 자세로 이야기를 함께 들을 수 있다.
- 1-2-2. 듣는 사람을 바라보며 자신있게 말할 수 있다.
- 1-2-3. 이야기 속 인물의 말과 행동을 따라 할 수 있다.
- 1-2-4. 인물에 어울리게 말과 행동을 할 수 있다.

- 1-3-1. 소리 내어 낱말을 따라 읽을 수 있다.
- 1-3-2. 하루 동안에 일어난 일을 말할 수 있다.
- 1-3-3. 그림일기에서 잘된 점을 말할 수 있다.
- 1-3-4. 이야기속 인물에 어울리게 말과 행동을 할 수 있다.

- 1-4-1. 상황에 맞는 인사말을 할 수 있다.
- 1-4-2. 고운 말을 쓰면 좋은 점을 안다.
- 1-4-3. 자신의 기분을 말하는 방법을 안다.
- 1-4-4. 듣는 사람을 생각하며 기분을 말할 수 있다.

- 1-5-1. 자음자와 모음자 놀이를 할 수 있다.
- 1-5-2. 끝말잇기를 할 수 있다.

Reading

- 1-1-1. 자음자와 모음자의 모양, 이름, 소리를 안다.
- 1-1-2. 글자에서 자음자와 모음자를 찾을 수 있다.
- 1-1-3. 받침이 있는 글자의 짜임을 안다.
- 1-1-4. 받침이 있는 글자를 읽을 수 있다.
- 1-1-5. 문장에 어울리는 낱말을 넣을 수 있다.
- 1-1-6. 문장을 소리내어 읽을 수 있다.
- 1-1-7. 노래를 듣고 재미를 느낄 수 있다.
- 1-1-8. 알맞은 목소리로 글을 읽어야 하는 까닭을 안다.
- 1-1-9. 시를 소리내어 읽을 수 있다.
- 1-1-10. 알맞은 목소리로 이야기를 읽을 수 있다.
- 1-1-11. 좋아하는 글을 찾아 친구들에게 읽어줄 수 있다.

- 1-2-1. 문장 부호를 안다.
- 1-2-2. 띄어 읽으면 좋은 점을 안다.
- 1-2-3. 글을 바르게 띄어 읽는 방법을 안다.
- 1-2-4. 글을 바르게 띄어 읽을 수 있다.

- 1-3-1. 누가 무엇을 했는지 생각하며 글을 읽을 수 있다.
- 1-3-2. 일어난 일을 생각하며 글을 읽을 수 있다.
- 1-3-3. 내용을 확인하며 글을 읽을 수 있다.
- 1-3-4. 글을 읽어 무엇을 설명하는지 안다.
- 1-3-5. 무엇을 설명하는지 생각하며 글을 읽을 수 있다.
- 1-3-6. 글을 실감나게 읽을 수 있다.

- 1-4-1. 글을 읽고 재미있는 부분을 찾을 수 있다.
- 1-4-2. 글을 읽고 새롭게 알게 된 점을 말할 수 있다.
- 1-4-3. 여러 가지 모양의 책을 읽을 수 있다.
- 1-4-4. 재미있게 읽은 책을 소개할 수 있다.

- 1-5-1. 이야기를 듣고 낱말을 읽을 수 있다.
- 1-5-2. 느낌을 살려 이야기를 읽어 줄 수 있다.
- 1-5-3. 이야기를 읽고 인물의 모습과 행동을 상상할 수 있다.
- 1-5-4. 이야기속 인물의 말과 행동을 따라 할 수 있다.
- 1-5-5. 소리나 모양을 떠올리며 시를 읽을 수 있다.
- 1-5-6. 소리나 모양을 떠올리며 글을 읽을 수 있다.
- 1-5-7. 만화 영화를 보고 재미있는 장면을 말할 수 있다.
- 1-5-8. 인물의 모습과 행동을 상상하며 이야기를 들을 수 있다.
- 1-5-9. 이야기를 읽고 인물의 모습과 행동을 상상할 수 있다.

Writing

- 1-1-1. 바르게 쓰는 자세를 익힐 수 있다.
- 1-1-2. 낱말을 따라 쓸 수 있다.
- 1-1-3. 선생님과 친구, 가족의 이름을 쓸 수 있다.
- 1-1-4. 자음자를 쓸 수 있다.
- 1-1-5. 모음자를 쓸 수 있다.
- 1-1-6. 글자를 읽고 쓸 수 있다.
- 1-1-7. 받침이 있는 글자를 쓸 수 있다.

- 1-2-1. 그림을 보고 문장을 만들 수 있다.
- 1-2-2. 문장을 쓰고 읽을 수 있다.
- 1-2-3. 문장 부호의 쓰임을 알고 문장을 바르게 쓸 수 있다.
- 1-2-4. 생각을 문장으로 나타낼 수 있다.
- 1-2-5. 여러 개의 문장으로 표현할 수 있다.
- 1-2-6. 받침에 주의해 문장을 쓸 수 있다.
- 1-2-7. 글을 읽고 생각이나 느낌을 문장으로 쓸 수 있다.

- 1-3-1. 그림일기 쓰는 방법을 안다.
- 1-3-2. 겪은 일을 그림일기로 쓸 수 있다.
- 1-3-3. 겪은 일이 드러나게 글을 쓸 수 있다.
- 1-3-4. 가장 쓰고 싶은 일을 일기로 쓸 수 있다.
- 1-3-5. 자신이 겪은 일을 시나 노래, 이야기 등으로 표현한다.

- 1-4-1. 자신이 쓴 글을 친구들 앞에서 소리 내어 읽을 수 있다.

Grade 2

Listening and Speaking

- 2-1-1. 차례를 나타내는 말을 생각하며 이야기를 들을 수 있다.
- 2-1-2. 일이 일어난 차례를 생각하며 말할 수 있다.
- 2-1-3. 일이 일어난 차례를 생각하며 들을 수 있다.
- 2-1-4. 이야기를 읽고 일이 일어난 차례대로 이야기의 내용을 말할 수 있다.
- 2-1-5. 일이 일어난 차례대로 이야기를 꾸밀 수 있다.

- 2-2-1. 듣는 사람의 기분을 생각하며 말하면 좋은 점을 안다.
- 2-2-2. 듣는 사람의 기분을 생각하며 대화할 수 있다.
- 2-2-3. 마음을 나타내는 말을 안다.

2-2-4. 마음을 나타내는 말을 사용해 마음을 표현할 수 있다.

2-3-1. 바른 자세로 자신 있게 말할 수 있다.

2-3-2. 여러 상황에서 자신 있게 말할 수 있다.

2-3-3. 글을 읽고 떠오르는 생각을 자신있게 말할 수 있다.

2-3-4. 주요 내용을 확인하고 자신의 생각을 말할 수 있다.

2-4-1. 바른 말을 사용하면 좋은 점을 안다.

2-4-2. 바른 말을 안다.

2-4-3. 바른 말로 대화할 수 있다.

2-4-4. 바른 말 사용에 대한 알림 활동을 할 수 있다.

2-4-5. 칭찬하는 말을 주고받을 때에 좋은 점을 안다.

2-4-6. 칭찬하는 말을 하거나 들었던 경험을 나눌 수 있다.

2-5-1. 말의 재미를 느낄 수 있다.

2-5-2. 재미있는 말놀이를 할 수 있다.

2-5-3. 주변의 여러 가지 낱말을 찾아 말놀이할 수 있다.

2-5-4. 말 덧붙이기 놀이를 할 수 있다.

2-5-5. 말의 재미를 느끼며 수수께끼 놀이를 할 수 있다.

2-5-6. 말의 재미를 느끼며 다섯 고개 놀이를 할 수 있다.

2-5-7. 여러 가지 말놀이를 할 수 있다.

2-5-8. 소개할 사람을 정해 말놀이를 할 수 있다.

2-6-1. 표현 방법을 생각하며 인형극을 볼 수 있다.

2-6-2. 인물의 말을 실감 나게 표현할 수 있다.

2-6-3. 인물의 말과 행동을 실감나게 표현하며 역할극을 할 수 있다.

Reading

2-1-1. 글을 읽고 주요 내용을 확인할 수 있다.

2-1-2. 주요 내용을 확인하며 글을 읽을 수 있다.

2-1-3. 글을 읽고 주요 내용을 찾는 방법을 안다.

2-1-4. 글을 읽고 주요 내용을 찾을 수 있다.

2-1-5. 주요 내용을 확인하고 자신의 생각을 말할 수 있다.

2-2-1. 글을 읽고 글쓴이의 마음을 짐작하는 방법을 안다.

2-2-2. 글쓴이의 마음을 짐작하며 글을 읽을 수 있다.

2-2-3. 글에 나오는 인물의 마음을 짐작하는 방법을 안다.

2-2-4. 글을 읽고 인물의 마음을 짐작할 수 있다.

2-3-1. 장면을 떠올리며 시를 읽을 수 있다.

- 2-3-2. 시 속 인물의 마음을 상상할 수 있다.
- 2-3-3. 시 속 인물의 마음을 상상하며 시를 읽을 수 있다.
- 2-3-4. 좋아하는 시를 낭송할 수 있다.
- 2-3-5. 좋아하는 책을 친구에게 소개할 수 있다.
- 2-3-6. 표현 방법을 생각하며 인형극을 볼 수 있다.

- 2-4-1. 인물의 마음을 생각하며 글을 읽을 수 있다.
- 2-4-2. 인물의 마음을 이해하며 만화 영화를 볼 수 있다.
- 2-4-3. 인물의 모습을 떠올리며 이야기를 들을 수 있다.
- 2-4-4. 이야기를 읽고 인물의 마음을 짐작할 수 있다.
- 2-4-5. 인물의 마음에 어울리는 목소리로 이야기를 읽을 수 있다.
- 2-4-6. 시를 읽고 생각이나 느낌을 말할 수 있다.
- 2-4-7. 이야기를 읽고 생각이나 느낌을 말할 수 있다.
- 2-4-8. 이야기에 나오는 인물의 모습을 상상할 수 있다.
- 2-4-9. 인물의 모습을 상상하는 방법을 안다.
- 2-4-10. 이야기를 듣고 인물의 모습을 상상할 수 있다.

Writing

- 2-1-1. 꾸며 주는 말을 사용해 짧은 글을 쓸 수 있다.
- 2-1-2. 자신의 생각을 나타내는 짧은 글을 쓸 수 있다.
- 2-1-3. 글을 읽고 인물에게 하고 싶은 말을 쓸 수 있다.
- 2-1-4. 인물의 마음을 생각하며 글을 쓸 수 있다.
- 2-1-5. 바른 말 사용에 대한 글을 쓸 수 있다.

- 2-2-1. 주변의 물건에 대해 설명할 수 있다.
- 2-2-2. 사람을 소개하는 글을 쓰는 방법을 안다.
- 2-2-3. 글자와 다르게 소리 나는 낱말에 주의하며 소개하는 글을 쓸 수 있다.
- 2-2-4. 인물을 소개하는 신문을 만들 수 있다.
- 2-2-5. 칭찬 쪽지를 쓸 수 있다.
- 2-2-6. 겪은 일을 차례대로 글로 쓸 수 있다.
- 2-2-7. 겪은 일을 나타낸 시나 노래를 안다.
- 2-2-8. 겪은 일을 시나 노래로 표현하는 방법을 안다.
- 2-2-9. 겪은 일을 나타낸 시나 노래의 일부분을 바꾸어 쓸 수 있다.
- 2-2-10. 자신이 겪은 일을 시나 노래로 표현할 수 있다.
- 2-2-11. 겪은 일을 표현한 시나 노래를 발표할 수 있다.

- 2-3-1. 경험을 떠올려 일기를 쓸 수 있다.
- 2-3-2. 인상 깊은 일이 무엇인지 안다.
- 2-3-3. 인상 깊었던 일을 글감으로 고르고 쓸 내용을 떠올릴 수 있다.
- 2-3-4. 인상 깊었던 일을 떠올리며 겪은 일을 차례대로 정리할 수 있다.

-
- 2-3-5. 인상 깊었던 일을 생각이나 느낌이 잘 드러나게 글로 쓸 수 있다.
 - 2-3-6. 인상 깊었던 일을 쓴 글로 책을 만들 수 있다.

- 2-4-1. 알맞은 낱말을 사용해 마음을 전하는 글을 쓸 수 있다.
- 2-4-2. 마음을 전하는 편지를 쓸 수 있다.
- 2-4-3. 이야기에 대한 생각과 느낌을 글로 쓸 수 있다.
- 2-4-4. 인물카드를 만들 수 있다.
- 2-4-5. 흥내 내는 말을 넣어 짧은 글을 쓸 수 있다.

Grade 3

Listening and Speaking

- 3-1-1. 높임 표현을 사용하는 경우를 안다.
- 3-1-2. 높임 표현을 사용하는 방법을 안다.
- 3-1-3. 높임 표현과 언어 예절을 생각하며 대화할 수 있다.
- 3-1-4. 높임 표현을 사용해 역할놀이를 할 수 있다.
- 3-1-5. 대상에 따라 알맞은 높임 표현을 사용해 말할 수 있다.

- 3-2-1. 원인과 결과에 따라 이야기 하는 방법을 안다.
- 3-2-2. 원인과 결과를 생각하며 경험을 말할 수 있다.

- 3-3-1. 표정, 몸짓, 말투에 주의하며 말하면 좋은 점을 안다.
- 3-3-2. 인물에게 알맞은 표정, 몸짓, 말투를 생각하며 작품을 읽고 대화를 나눌 수 있다.
- 3-3-3. 상황에 어울리는 표정, 몸짓, 말투 알기
- 3-3-4. 만화 영화를 보고 표정, 몸짓, 말투의 특징을 안다.
- 3-3-5. 인물의 말과 행동을 살피며 만화 영화를 감상할 수 있다.
- 3-3-6. 이야기 극장을 만들 수 있다.
- 3-3-7. 인물의 성격을 생각하며 극본을 소리 내어 읽을 수 있다.
- 3-3-8. 알맞은 표정, 몸짓, 말투를 생각하며 근본을 읽을 수 있다.

- 3-4-1. 메모했던 경험을 나눌 수 있다.
- 3-4-2. 내용을 간추리며 들을 수 있다.
- 3-4-3. 알고 싶은 내용이 담긴 글을 읽고 간추려 발표할 수 있다.

Reading

- 3-1-1. 중심 문장과 뒷받침 문장을 안다.
- 3-1-2. 중심 문장과 뒷받침 문장을 파악하며 글을 읽을 수 있다.
- 3-1-3. 글을 읽고 문단의 중심내용을 찾을 수 있다.
- 3-1-4. 아는 내용이나 겪은 일과 관련지어 글을 이해하면 좋은 점을 안다.
- 3-1-5. 아는 내용이나 겪은 인과 관련지어 글을 읽을 수 있다.

3-1-6. 글을 읽고 중심 생각을 찾는 방법을 안다.

3-1-7. 글을 읽고 중심 생각을 찾을 수 있다.

3-2-1. 글을 읽고 내용을 간추리는 방법을 안다.

3-2-2. 글을 읽고 내용을 간추릴 수 있다.

3-2-3. 글을 읽고 인물의 의견과 그 까닭을 안다.

3-2-4. 글쓴이의 의견을 파악하는 방법을 안다.

3-2-5. 의견을 파악하며 글을 읽을 수 있다.

3-2-6. 이야기 속 인물의 마음을 헤아리며 글을 읽을 수 있다.

3-2-7. 시간의 흐름을 생각하며 이야기를 읽을 수 있다.

3-2-8. 일하는 방법에 따라 내용을 파악하며 글을 읽을 수 있다.

3-2-9. 장소 변화에 따라 글의 내용을 간추릴 수 있다.

3-2-10. 글의 흐름에 따라 내용을 간추릴 수 있다.

3-2-11. 읽을 책을 정하고 내용을 예상할 수 있다.

3-2-12. 인상 깊은 내용을 정리하며 책을 읽을 수 있다.

3-3-1. 편지를 읽고 마음을 나타내는 말을 읽힐 수 있다.

3-3-2. 글을 읽고 글쓴이의 마음을 짐작할 수 있다.

3-3-3. 국어 사전을 활용하며 글을 읽을 수 있다.

3-3-4. 낱말의 뜻을 짐작하는 방법을 안다.

3-3-5. 낱말의 뜻을 짐작하며 글을 읽을 수 있다.

3-3-6. 생략된 내용을 짐작하는 방법을 안다.

3-3-7. 생략된 내용을 짐작하며 글을 읽을 수 있다.

3-3-8. 안내문을 읽을 수 있다.

3-3-9. 글을 읽고 다른 사람에게 소개한 경험을 나눌 수 있다.

3-3-10. 여러 가지 방법으로 책을 소개할 수 있다.

3-4-1. 읽을 책을 정하고 내용을 예상할 수 있다.

3-4-2. 자신의 경험과 관련지어 책을 읽을 수 있다.

3-4-3. 책을 읽고 책 내용을 간추리고 생각을 나눌 수 있다.

3-4-4. 시에 나타난 감각적 표현을 안다.

3-4-5. 시를 읽고 여러 가지 감각적 표현을 말할 수 있다.

3-4-6. 시를 읽고 재미나 감동을 나눌 수 있다.

3-4-7. 재미나 감동을 느낀 부분을 생각하며 시를 읽을 수 있다.

3-4-8. 이야기에 나타난 감각적 표현을 안다.

3-4-9. 이야기를 읽고 생각이나 느낌을 나눌 수 있다.

3-4-10. 이야기를 읽고 생각이나 느낌을 표현할 수 있다.

3-4-11. 이야기를 읽고 재미나 감동을 느낀 부분을 찾을 수 있다.

3-4-12. 읽을 책을 정하고 내용을 예상할 수 있다.

3-4-13. 인상 깊은 내용을 정리하며 책을 읽을 수 있다.

-
- 3-4-14. 책 내용을 간추리고 생각을 나눌 수 있다.
 - 3-4-15. 여러 가지 방법으로 책을 소개할 수 있다.

Writing

- 3-1-1. 설명하는 글을 쓴 경험을 나눌 수 있다.
 - 3-1-2. 설명하는 글에서 중심 문장과 뒷받침 문장을 생각하며 문단을 쓸 수 있다.
 - 3-1-3. 주변의 문제에 대한 자신의 의견을 까닭을 제시하며 글을 쓸 수 있다.
 - 3-1-4. 자신의 경험에서 인상 깊은 일을 글로 쓰는 방법을 안다.
 - 3-1-5. 인상 깊은 일을 글로 쓸 수 있다.
 - 3-1-6. 우리 반 소식지를 만들 수 있다.
-
- 3-2-1. 원인과 결과를 생각하며 이야기를 꾸밀 수 있다.
 - 3-2-2. 글의 흐름에 따라 내용을 간추려 쓸 수 있다.
 - 3-2-3. 우리 지역을 소개하는 글을 쓸 수 있다.
-
- 3-3-1. 마음이 잘 드러나게 편지 쓰는 방법을 익힐 수 있다.
 - 3-3-2. 마음을 담아 편지를 쓸 수 있다.
 - 3-3-3. 읽을 사람을 생각하며 마음을 전하는 글을 쓸 수 있다.
 - 3-3-4. 다른 사람에게 마음을 전하는 글을 쓸 수 있다.
 - 3-3-5. 느낌을 살려 시를 쓸 수 있다.

Grade 4

Listening and Speaking

- 4-1-1. 회의 절차와 참여자 역할을 익힐 수 있다.
 - 4-1-2. 회의 주제에 맞게 말할 내용을 준비할 수 있다.
 - 4-1-3. 예절을 지키며 회의할 수 있다.
-
- 4-2-1. 주장에 대한 찬반 의견을 나눌 수 있다.
 - 4-2-2. 토론이 필요한 경우를 안다.
 - 4-2-3. 글을 읽고 근거 자료의 타당성을 평가할 수 있다.
 - 4-2-4. 토론 절차와 방법을 안다.
 - 4-2-5. 주제를 정해 토론할 수 있다.
 - 4-2-6. 글을 읽고 독서 토론을 할 수 있다.
-
- 4-3-1. 들은 내용을 간추릴 수 있다.
 - 4-3-2. 글의 전개에 따라 내용을 간추릴 수 있다.
-
- 4-4-1. 절차와 규칙을 지키며 회의를 할 수 있다.
 - 4-4-2. 문자가 필요한 까닭을 안다.

-
- 4-4-3. 한글을 만든 과정을 이해할 수 있다.
 - 4-4-4. 한글의 특성을 이해할 수 있다.
 - 4-4-5. 한글을 소중히 여기는 마음을 지닐 수 있다.
 - 4-4-6. 한글을 바르게 사용할 수 있다.
 - 4-4-7. 대화 예절을 지키며 대화하는 방법을 안다.
 - 4-4-8. 온라인 대화를 할 때 지켜야 할 예절을 안다.
 - 4-4-9. 대화 예절을 표어로 만들 수 있다.

Reading

- 5-1-1. 글의 내용을 간추리는 방법을 안다.
 - 5-1-2. 이야기의 흐름에 따라 내용을 간추릴 수 있다.
 - 5-1-3. 글의 전개에 따라 내용을 간추릴 수 있다.
 - 5-1-4. 읽은 책에 대한 생각이나 느낌을 말할 수 있다.
 - 5-1-5. 글을 읽고 감동받은 부분에 대한 생각이나 느낌을 쓸 수 있다.
 - 5-1-6. 글을 읽고 독서 감상문을 쓸 수 있다.
 - 5-1-7. 시를 읽고 경험을 말할 수 있다.
 - 5-1-8. 시를 읽고 느낌을 표현할 수 있다.
-
- 5-2-1. 사전에서 뜻을 찾아 낱말 사이의 관계를 안다.
 - 5-2-2. 여러 가지 사전에서 낱말의 뜻을 찾을 수 있다.
 - 5-2-3. 전기문의 특성을 안다.
 - 5-2-4. 전기문의 특성을 생각하며 읽을 수 있다.
 - 5-2-5. 본받을 점을 생각하며 전기문을 읽을 수 있다.
-
- 5-3-1. 사실과 의견의 차이점을 안다.
 - 5-3-2. 글을 읽고 사실과 의견 구별할 수 있다.
 - 5-3-3. 사실에 대한 의견을 말할 수 있다.
 - 5-3-4. 편지를 읽고 마음을 드러내는 표현을 찾을 수 있다.
 - 5-3-5. 의견이 적절한지 판단해야 하는 까닭을 안다.
 - 5-3-6. 글을 읽고 글쓴이의 의견을 평가할 수 있다.
-
- 5-4-1. 생각이나 느낌이 서로 다른 까닭을 말할 수 있다.
 - 5-4-2. 시나 이야기를 읽고 생각이나 느낌을 나눌 수 있다.
 - 5-4-3. 생각이나 느낌을 시와 그림으로 표현해 전시회를 할 수 있다.
 - 5-4-4. 읽을 책을 정하고 내용을 예상할 수 있다.
 - 5-4-5. 궁금한 점을 떠올리며 책을 읽을 수 있다.
 - 5-4-6. 책 내용을 간추리고 생각을 나눌 수 있다.
 - 5-4-7. 이야기를 보고 내용에 대한 생각을 나눌 수 있다.
 - 5-4-8. 이야기를 읽고 다른 사람에게 들려줄 수 있다.

-
- 5-5-1. 이야기를 읽어 본 경험을 말할 수 있다.
 - 5-5-2. 인물, 사건, 배경을 생각하며 이야기를 읽을 수 있다.
 - 5-5-3. 인물의 성격을 짐작하며 이야기를 읽을 수 있다.
 - 5-5-4. 사건의 흐름을 생각하며 이야기를 읽을 수 있다.
 - 5-5-5. 이야기를 꾸며 책을 만들 수 있다.

- 5-6-1. 그림의 차례를 정해 이야기를 꾸밀 수 있다.
- 5-6-2. 사건의 흐름을 파악하며 이야기를 읽을 수 있다.
- 5-6-3. 이야기의 흐름을 이해할 수 있다.

Writing

- 4-1-1. 사실에 대한 의견을 쓸 수 있다.
- 4-1-2. 학급에서 일어난 일에 대해 의견이 드러나게 쓸 수 있다.
- 4-1-3. 제안하는 글에 대해 안다.
- 4-1-4. 문장의 짜임에 대해 안다.
- 4-1-5. 제안하는 글을 쓰는 방법을 안다.
- 4-1-6. 제안하는 글을 쓰고 발표할 수 있다.
- 4-1-7. 문장의 짜임에 맞게 문장을 쓸 수 있다.
- 4-1-8. 자신의 의견을 제시하는 글을 쓸 수 있다.
- 4-1-9. 의견을 제시하는 글을 쓰고 친구들과 의견을 나눌 수 있다.
- 4-1-10. 자신의 의견이 드러나게 글을 쓸 수 있다.
- 4-1-11. 학교에서 일어난 일에 대한 의견을 발표할 수 있다.

- 4-2-1. 읽는 사람을 고려해 생각을 쓸 수 있다.
- 4-2-2. 마음을 전하는 글을 쓰는 방법을 안다.
- 4-2-3. 마음을 전하는 글을 쓸 수 있다.
- 4-2-4. 마음을 담아 붙임쪽지를 쓸 수 있다.

- 4-3-1. 이야기를 읽고 이어질 내용을 상상해 쓸 수 있다.
- 4-3-2. 자신이 상상한 이야기를 친구들에게 들려줄 수 있다.
- 4-2-3. 책을 읽고 책의 내용을 간추릴 수 있다.
- 4-2-4. 독서 감상문을 쓰는 방법을 안다.
- 4-2-5. 글을 읽고 감동받은 부분에 대한 생각이나 느낌을 쓸 수 있다.
- 4-2-6. 글을 읽고 독서감상문을 쓸 수 있다.

Grade 5

Listening and Speaking

- 5-1-1. 대화의 특성을 이해할 수 있다.
- 5-1-2. 상대가 잘한 일이나 상대의 장점을 찾아 칭찬할 수 있다.

- 5-2-1. 토의 뜻과 필요성을 안다.
- 5-2-2. 토의 절차와 방법을 안다.
- 5-2-3. 토의 주제를 파악하고 의견을 나눌 수 있다.
- 5-2-4. 글을 읽고 토의할 수 있다.
- 5-2-5. 알맞은 주제를 정해 의견을 나눌 수 있다,
- 5-2-6. 의견을 조정해야 하는 까닭을 안다.
- 5-2-7. 토의 과정에서 의견을 조정하는 방법을 안다.
- 5-2-8. 토의에서 자신의 의견을 뒷받침할 자료를 찾아 읽을 수 있다.
- 5-2-9. 찾은 자료를 정리해 알기 쉽게 표현할 수 있다.
- 5-2-10. 의견을 조정하며 토의할 수 있다.

- 5-3-1. 적절한 표정, 몸짓, 말투를 사용해 말할 수 있다.
- 5-3-2. 듣는 사람을 고려해 상황에 맞게 말할 수 있다.
- 5-3-3. 자신이 겪은 일을 실감 나게 말할 수 있다.

- 5-4-1. 우리말이 훼손된 사례를 살펴볼 수 있다.
- 5-4-2. 여러 사람 앞에서 조사한 내용을 발표할 수 있다.

- 5-5-1. 상대를 배려하며 조언할 수 있다.
- 5-5-2. 서로 공감하며 대화할 수 있다.
- 5-5-3. 공감하며 대화를 해야 하는 까닭을 안다.
- 5-5-4. 공감하며 대화하는 방법을 안다.
- 5-5-5. 이야기를 읽고 공감하며 대화를 나눌 수 있다.

- 5-6-1. 기억에 남는 일을 이야기할 수 있다.
- 5-6-2. 일상생활의 경험이 잘 드러난 글을 읽을 수 있다.
- 5-6-3. 연극의 특성을 알고 자신의 경험을 즉흥으로 표현할 수 있다.

Reading

- 5-1-1. 겪은 일을 떠올리며 글을 읽을 수 있다.
- 5-1-2. 아는 지식을 활용해 글을 읽을 수 있다.
- 5-1-3. 지식이나 경험을 활용해서 읽으면 좋은 점을 안다.
- 5-1-4. 지식이나 경험을 활용해 글을 읽을 수 있다.
- 5-1-5. 경험을 떠올리며 작품을 읽을 때 좋은 점을 안다.
- 5-1-6. 경험을 떠올리며 시를 읽을 수 있다.
- 5-1-7. 경험을 떠올리며 이야기를 읽을 수 있다.

- 5-2-1. 설명하는 글을 읽은 경험을 나눌 수 있다.
- 5-2-2. 여러 가지 설명 방법을 안다.

- 5-2-3. 구조를 생각하며 글을 요약할 수 있다.
- 5-2-4. 자료를 찾아 읽고 요약할 수 있다.
- 5-2-5. 낱말의 뜻을 짐작하며 읽어야 하는 까닭을 안다.
- 5-2-6. 낱말의 뜻을 짐작하며 읽을 수 있다.
- 5-2-7. 글을 요약하는 방법을 안다.
- 5-2-8. 글의 구조에 따라 요약할 수 있다.

- 5-3-1. 글을 읽고 글쓴이의 주장을 파악할 수 있다.
- 5-3-2. 근거의 적절성을 파악하며 글을 읽을 수 있다.
- 5-3-3. 글을 읽고 근거 자료의 타당성을 평가할 수 있다.

- 5-4-1. 글을 찾아 읽은 경험을 나눌 수 있다.
- 5-4-2. 글의 종류에 따른 읽기 방법을 안다.
- 5-4-3. 필요한 글을 찾아 정리할 수 있다.
- 5-4-4. 토의에서 자신의 의견을 뒷받침할 자료를 찾아 읽을 수 있다.
- 5-4-5. 찾은 자료를 정리해 알기 쉽게 표현할 수 있다.
- 5-4-6. 여러 가지 매체 자료를 안다.
- 5-4-7. 매체 자료의 특성을 생각하며 알맞은 방법으로 읽을 수 있다.
- 5-4-8. 알맞은 방법으로 매체 자료를 읽고 주요 내용을 정리할 수 있다.
- 5-4-9. 매체 자료의 특성을 생각하며 이야기를 읽고 현실 섹제와 비교할 수 있다.

- 5-5-1. 문학 작품을 읽는 능력과 태도를 기를 수 있다.
- 5-5-2. 자신의 관심 분야와 관련한 인물이나 사건을 담은 책을 읽는 능력과 태도를 기를 수 있다.

Writing

- 5-1-1. 문장을 구성하는 성분을 안다.
- 5-1-2. 쓸 내용을 떠올릴 수 있다.
- 5-1-3. 떠올린 내용을 조직하고 글로 나타낼 수 있다.
- 5-1-4. 호응 관계가 알맞은 문장을 쓸 수 있다.
- 5-1-5. 자신의 생각을 글로 나타낼 수 있다.

- 5-2-1. 대상을 생각하며 설명하는 글을 쓸 수 있다.
- 5-2-2. 발표 주제를 생각하며 자료를 조사하고 구성할 수 있다.
- 5-2-3. 우리말 바르게 사용하기를 알리는 만화를 그릴 수 있다.

- 5-3-1. 기행문을 읽거나 쓴 경험을 이야기할 수 있다.
- 5-3-2. 기행문의 특성을 파악할 수 있다.
- 5-3-3. 여정, 견문, 감상이 드러나게 기행문을 쓸 수 있다.
- 5-3-4. 여행지 안내장을 만들 수 있다.
- 5-3-5. 체험한 일을 떠올리며 감상이 드러나는 글을 쓸 수 있다.

- 5-3-6. 지식이나 경험을 활용해 함께 글을 고칠 수 있다.
- 5-3-7. 지식이나 경험을 활용해 현장 체험학습을 계획할 수 있다.
- 5-3-8. 경험을 떠올리며 시를 쓸 수 있다.
- 5-3-9. 경험을 이야기로 표현하는 방법을 안다.
- 5-3-10. 겪은 일을 이야기로 만들 수 있다.

- 5-4-1. 예절을 지키며 누리 소통망에서 대화할 수 있다.
- 5-4-2. 겪은 일이 드러나게 글을 쓸 수 있다.
- 5-4-3. 매체를 활용해 겪은 일이 드러나는 글을 쓸 수 있다.
- 5-4-4. 우리 반 글 모음집을 만들 수 있다.

- 5-5-1. 자신의 관심분야와 관련한 인물이나 사건을 담은 책을 읽을 수 있다.

Grade 6

Listening and Speaking

- 구어 의사소통의 특성을 바탕으로 듣기 말하기 활동을 할 수 있다.
- 의견을 제시하고 함께 조정하여 토의할 수 있다.
- 절차와 규칙을 지키고 근거를 제시하며 토론할 수 있다.
- 자료를 정리하여 말할 내용을 체계적으로 구성할 수 있다.
- 매체 자료를 활용하여 내용을 효과적으로 발표할 수 있다.
- 드러나지 않거나 생략된 내용을 추론하며 들을 수 있다.
- 상대가 처한 상황을 이해하고 공감하며 듣는 태도를 지닐 수 있다.

Reading

- 읽기는 배경지식을 활용하여 의미를 구성하는 과정임을 이해하고 글을 읽을 수 있다.
- 글의 구조를 고려하여 글 전체의 내용을 요약할 수 있다.
- 글을 읽고 글쓴이가 말하고자 하는 주장이나 주제를 파악할 수 있다.
- 글을 읽고 내용의 타당성과 표현의 적절성을 판단할 수 있다.
- 매체에 따른 다양한 읽기 방법을 이해하고 적절하게 적용하며 읽을 수 있다.

Writing

- 쓰기는 절차에 따라 의미를 구성하고 표현하는 과정임을 이해하고 글을 쓸 수 있다.
- 목적이나 주제에 따라 알맞은 내용과 매체를 선정하여 글을 쓸 수 있다.
- 목적이나 대상에 따라 알맞은 형식과 자료를 사용하여 설명하는 글을 쓸 수 있다.
- 적절한 근거와 알맞은 표현을 사용하여 주장하는 글을 쓸 수 있다.
- 독자를 존중하고 배려하며 글을 쓰는 태도를 지닐 수 있다.

Grammar

- 언어는 생각을 표현하며 다른 사람과 관계를 맺는 수단임을 이해하고 국어생활을 할 수 있다.
- 낱말이 상황에 따라 다양하게 해석됨을 탐구할 수 있다.

국어의 문장 성분을 이해하고 호응 관계가 올바른 문장을 구성할 수 있다.
일상생활에서 국어를 바르게 사용하는 태도를 지닐 수 있다.

Literature

문학은 가치 있는 내용을 언어로 표현하여 아름다움을 느끼게 하는 활동임을 이해하고 문학 활동을 할 수 있다.

작품 속 세계와 현실 세계를 비교하며 작품을 감상할 수 있다.

작품에 대한 이해와 감상을 바탕으로 하여 다른 사람과 적극적으로 소통할 수 있다.

Grade 7

Listening and Speaking

소통의 효율성을 고려하여 듣기와 말하기 계획을 수립할 수 있다.

의사소통 방식의 다양성을 인정하며 원활하게 의사소통 할 수 있다.

상황과 맥락을 고려하여 상대의 이야기에 공감하며 대화할 수 있다.

규칙을 준수하며 토론에 적극적으로 참여할 수 있다.

토론의 과정과 결과를 평가할 수 있다.

제작한 매체 자료를 사용하여 효과적으로 발표할 수 있다.

전통적 말 문화의 장점을 계승하고 건전한 말 문화를 형성하는 태도를 지닌다.

Reading

독자의 배경지식, 읽기 맥락 등을 활용하여 글의 내용을 예측할 수 있다.

읽기 목적이나 글의 특성을 고려하여 글 내용을 요약할 수 있다.

글의 내용을 토대로 다양한 질문을 생성할 수 있다.

글이나 매체에 제시된 다양한 자료의 효과와 적절성을 평가할 수 있다.

동일한 대상을 다룬 서로 다른 글을 읽고 관점과 내용의 차이를 비교할 수 있다.

필자가 사용한 표현 방식의 효과를 평가할 수 있다.

Writing

주제, 목적, 독자를 고려하여 쓰기 과정을 점검하고 조정할 수 있다.

제시된 대상이나 개념에 맞는 적절한 설명 방법을 선택하여 독자가 이해하기 쉽게 글을 쓸 수 있다.

관찰, 조사, 실험한 내용을 절차와 결과가 드러나게 내용을 구성하여 보고하는 글을 쓸 수 있다.

요구 사항과 문제 해결 방안을 담아 건의하는 글을 쓸 수 있다.

삶의 체험을 바탕으로 독자에게 감동이나 즐거움을 주는 글을 쓸 수 있다.

매체의 특성을 고려하여 효과적으로 글을 쓸 수 있다.

Grammar

실제 언어 생활과 관련지어 언어의 본질을 설명할 수 있다.

어휘의 유형을 이해하고 활용할 수 있다.

높임법의 문법 요소를 이해하고 담화 상황에 맞게 사용할 수 있다.

지역, 세대, 성별, 다문화 등의 사회 문화적 맥락과 관련된 언어 변이 현상을 설명할 수 있다.

Literature

문학적 표현 방식이 드러난 부분을 찾고 그의 의미와 문학적 효과를 이해할 수 있다.
다양한 문학적 표현 방식을 활용하여 자신의 생각과 감정을 표현할 수 있다.
갈등의 진행과 해결 과정을 바탕으로 작품의 의미를 이해할 수 있다.
문학적 표현에 담긴 작가의 태도와 표현의 효과를 분석할 수 있다.
화자나 시점의 변화에 따라 작품의 분위기와 내용이 달라짐을 설명할 수 있다.
자신의 일상에서 의미 있는 경험을 찾아 다양한 갈래의 문학 작품으로 표현할 수 있다.
문학 작품을 읽고 그 작품이 자신의 삶에 어떤 영향을 미쳤으며 어떤 가치를 지니는지 말할 수 있다.

Grade 8

Listening and Speaking

소통의 효율성을 고려하여 듣기와 말하기 계획을 수립할 수 있다.
의사소통 방식의 다양성을 인정하며 원활하게 의사소통 할 수 있다.
공식적인 상황에서 담화를 들은 후 자신의 의견을 조리 있게 말할 수 있다.
상황과 맥락을 고려하여 상대의 이야기에 공감하며 대화할 수 있다.
담화에 나타난 설득의 전략을 평가할 수 있다.
규칙을 준수하며 토론에 적극적으로 참여할 수 있다.
토론의 과정과 결과를 평가할 수 있다.
제작한 매체 자료를 사용하여 효과적으로 발표할 수 있다.
발표에서 매체 자료의 사용 윤리를 준수하는 태도를 지닌다.
폭력적인 언어를 긍정적이고 서로를 존중하는 바람직한 언어 표현으로 순화하여 말할 수 있다.

Reading

다양한 자원을 활용하여 글의 내용을 예측하며 읽을 수 있다.
읽기의 원리에 따라 자신의 읽기 과정을 점검하며 조절할 수 있다.
글이나 매체에 제시된 다양한 자료의 효과와 적절성을 평가할 수 있다.
설명문에 활용된 설명 방식을 파악하고 적절성을 평가 할 수 있다.
주장하는 글을 읽고, 논증 방식을 파악할 수 있다.
동일한 대상을 다룬 서로 다른 글을 읽고 관점과 내용의 차이를 비교할 수 있다.

Writing

주제, 목적, 독자를 고려하여 쓰기 과정을 점검하고 조정할 수 있다.
제시된 대상이나 개념에 맞는 적절한 설명 방법을 선택하여 독자가 이해하기 쉽게 글을 쓸 수 있다.
관찰, 조사, 실험한 내용을 절차와 결과가 드러나게 내용을 구성하여 보고하는 글을 쓸 수 있다.
의견의 차이가 드러나는 문제를 분석하고 자신의 의견을 제시하는 글을 쓸 수 있다.
삶의 체험을 바탕으로 독자에게 감동이나 즐거움을 주는 글을 쓸 수 있다.
여러가지 표현 방법을 활용하여 자신의 삶을 성찰하고 계획하는 글을 쓸 수 있다.
영상 언어의 특성을 살려 영상물을 만들 수 있다.
매체의 특성을 고려하여 효과적으로 글을 쓸 수 있다.
건전하고 책임감 있는 태도로 쓰기 윤리를 준수하며 글을 쓸 수 있다.

Grammar

실제 언어 생활과 관련지어 언어의 본질을 설명할 수 있다.

어휘의 유형을 이해하고 활용할 수 있다.
높임법의 문법 요소를 이해하고 담화 상황에 맞게 사용할 수 있다.
지역, 세대, 성별, 다문화 등의 사회 문화적 맥락과 관련된 언어 변이 현상을 설명할 수 있다.

Literature

문학적 표현 방식이 드러난 부분을 찾고 그의 의미와 문학적 효과를 이해할 수 있다.
다양한 문학적 표현 방식을 활용하여 자신의 생각과 감정을 표현할 수 있다.
갈등의 진행과 해결 과정을 바탕으로 작품의 의미를 이해할 수 있다.
문학 작품을 다양한 관점과 방법으로 근거를 들어 해석할 수 있다.
문학적 표현에 담긴 작가의 태도와 표현의 효과를 분석할 수 있다.
화자나 시점의 변화에 따라 작품의 분위기와 내용이 달라짐을 설명할 수 있다.
작품이 창작된 사회, 문화, 역사적 상황을 바탕으로 작품의 의미를 설명할 수 있다.
적절한 근거를 들어 주체적인 관점에서 작품을 해석하고 평가할 수 있다.
자신의 일상에서 의미 있는 경험을 찾아 다양한 갈래의 문학 작품으로 표현할 수 있다.
문학 작품을 읽고 그 작품이 자신의 삶에 어떤 영향을 미쳤으며 어떤 가치를 지니는지 말할 수 있다.

Grade 9

Listening and Speaking

상대를 존중하고 배려하는 의사소통 문화를 형성하는 태도를 기른다.
상황과 대상에 맞는 언어 예절을 갖추어 대화에 참여할 수 있다.
매체 자료를 활용하여 정보를 효과적으로 전달 할 수 있다.
대화에서 공감적 듣기를 할 수 있다.

대화와 타협을 통해 문제를 해결할 수 있다.
토론의 쟁점을 도출하여 논증을 구성할 수 있다.
대화와 타협을 통해 문제를 해결할 수 있다.
토론을 통해 공동체의 문제를 해결할 수 있다.

Reading

의미를 능동적으로 구성하며 글을 읽을 수 있다.
상황에 맞는 독서 방법을 적용하여 글을 읽을 수 있다.
독서의 목적과 상황, 독자의 흥미나 가치관을 고려하여 글을 선택할 수 있다.

Writing

글을 쓰는 데 필요한 작문 과정의 원리 및 특성에 대해 알 수 있다.
다양한 매체에서 수집한 정보를 통일성 있게 조직하여 글을 쓸 수 있다.
다양한 매체에서 수집한 정보를 응집성 있게 조직하여 글을 쓸 수 있다.
글의 목적, 주제, 독자, 글의 관습을 고려하고 여러 가지 표현기법과 문체를 사용하여 글을 쓸 수 있다.
자신이 쓴 글을 고쳐 쓰기 방법을 활용하여 고쳐 쓸 수 있다.
자신이 쓰는 글이 독자에게 미치는 영향을 고려하여 독자를 존중하고 배려하는 글을 쓸 수 있다.

Grammar

국어의 음운 체계에 대한 이해를 바탕으로 교양 있는 발음 생활을 할 수 있다.
어휘의 체계와 양상을 고려하여 담화 상황에 적절한 어휘를 사용할 수 있다.
한글 맞춤법의 원리와 내용을 설명할 수 있다.
교양 있는 표기 생활에 대한 인식을 바탕으로 한글 맞춤법에 맞게 표기할 수 있다.

Literature

갈래의 대표 작품을 각 갈래의 내용과 형식상의 특징을 고려하여 감상할 수 있다.
문학 작품에서 작가의 개성(성격, 취향, 인생관 등)이 드러난 부분을 찾을 수 있다.
여러 작가의 작품을 읽고 작가들의 개성을 비교할 수 있다.
문학이 생산되고 수용되는 사회적 소통 과정에 대해 설명할 수 있다.

Grade 10

Listening and Speaking

상대를 존중하고 배려하는 의사소통 문화를 형성하는 태도를 기른다.
상황과 대상에 맞는 언어 예절을 갖추어 대화에 참여할 수 있다.
대화에서 공감적 듣기를 할 수 있다.
매체 자료를 활용하여 정보를 효과적으로 전달 할 수 있다.
토론의 쟁점을 도출하여 논증을 구성할 수 있다.
설득 담화를 듣고, 신뢰성, 타당성, 공정성을 평가할 수 있다.

Reading

여러 시대의 자료를 읽으며 글쓰기의 관습이나 독서 문화의 차이점을 파악할 수 있다.
문제 해결적 사고 과정으로서 독서의 특성을 적용하여 다양한 유형의 글을 읽을 수 있다.
다양한 매체 자료를 비판적으로 분석하고 평가할 수 있다.

Writing

작문 맥락에 맞게 정보를 조직하여 설명하는 글을 쓸 수 있다.
여러 가지 타당한 근거를 제시하여 주장하는 글을 쓸 수 있다.
매체의 효과와 특성을 고려하여 책임감 있게 인터넷상의 글쓰기를 할 수 있다.

Grammar

올바른 문장 표현에 대해 탐구할 수 있다.
효과적인 담화 표현에 대해 탐구할 수 있다.
국어의 변천에 대해 설명할 수 있다.
한글의 제자 원리와 가치를 설명할 수 있다.

Literature

주요 작품을 읽고 한국 문학의 전통이 어떻게 유지되고 변형되어 왔는지를 설명할 수 있다.
문학 작품에 표현된 형식적, 내용적 아름다움과 가치를 발견할 수 있다.
문학의 효용을 이해하며 작품을 생산할 수 있다.
작품 속 인물들의 다양한 갈등 상황과 갈등 해결 과정을 비평적으로 이해할 수 있다.



Language Acquisition (Mandarin, Korean, Spanish)



PYP Language Acquisition (Mandarin, Korean)

Interpersonal: (Listening and Speaking) - Phase 1

1. Interpret and use basic age-appropriate courtesy expressions and gestures.

- 1.1 I can greet a friend/classmate, and a teacher or someone older (with respect);
- 1.2 I can say 'thank you' 'Sorry', 'Good bye' and reply;
- 1.3 I can understand the greetings/courtesy gestures and respond accordingly;

2. Introduce oneself briefly to others and respond to in class;

- 2.1 I can introduce myself and provide basic personal information (E.x., age, name)

3. Ask and answer simple questions, (e.g. about things in a school bag, family members, friends, animals etc)

- 3.1 I can respond to some yes/no questions.
- 3.2 I can respond to some who, what, when, where questions.
- 3.3 I can answer questions about something that I am learning.
- 3.4 Answer and ask questions about things learned in class

4. Use descriptive words to describe objects (e.g big/small, long/short, tall/short, etc.)

- 4.1 I can use learned vocabulary to play games (E.x.,Uno and hopscotch etc.)
- 4.2 I can use simple descriptive words to describe the feature, shape, colors of (food items, animals),

5. Express needs and likes/dislikes.

- 5.1. I can talk about things I had, like or dislike (E.x., animal, food, colors, shapes etc.)
- 5.2. I can use basic words/phrases/simple sentences to express needs and likes/dislikes.

Interpretive (Listening, Reading and Viewing) - Phase 1

1. Understand and respond to simple oral classroom instructions

- 1.1 I can understand and follow some simple class instructions;

2. Interpret the meaning of gestures, intonation and other visual or auditory cues.

- 2.1 I can demonstrate my understanding of songs and rhymes learned by acting out;
- 2.2 I can understand the words which represent the things when I hear them;

3. Understand basic words, phrases and simple sentences (make connections with corresponding pictures, objects, or meaning in English)

- 3.1 I can recognize my name in written form.
- 3.2 I can demonstrate my understanding of the learned vocabulary by playing games;
- 3.3 I can use keyboard to type (some Chinese characters using Pinyin;Korean alphabet).

4. Recognize simple letters / pinyin / characters through visual and sound

- 4.1 I can recognize the simple Korean alphabets/pinyin/photographic characters.
- 4.2 I can recognize the sound of letters when they are spoken or spelled out.
- (Korean) I can alphabetize/spell a few names or words
- 4.3 I can distinguish basic sounds from one another by listening;
- (Mandarin) I can distinguish the tones by listening;
- (Mandarin) I can recognize four tone marks in relation to their sounds;
- 4.4 I can recognize some simple (photographic) characters/ words and match them with the objects which they represent;

Presentational (Writing / Presenting / Speaking) - Phase 1

1. Present information about oneself (interests and activities using a mixture of practiced or memorized words, phrases and simple sentences).

- 1.1 I can introduce myself with simple information to a group sing pictures (e.g. name, likes/ dislikes)
- 1.2 I can produce and present a poster/picture book to display what I have learned;
- 1.3 I can recite words and phrases that I have learned.

2. Perform simple actions (Sing a song) or activities (presentation) in the target language.

- 2.1 I can sing a short song.
- 2.2 I can recite a simple rhyme / poem / song that related to the topics learned.

3. Recognize and copy simple photographic characters / letters in correct orders

- 3. I can copy/write words and phrases that I have learned.

Interpersonal (Listening and Speaking) - Phase 2

1. Introduce oneself with more details to different audiences;

- 1.1 I can exchange simple personal information including family members with classmates;

2. Ask simple questions and make simple statements related to familiar and age-appropriate topics.

- 2.1 I can ask and answer simple questions related to familiar topics
- 2.2 I can communicate some basic information about my everyday life.(e.x., what I eat, dates, time, weather, cost of items purchased)
- 2.3 I can answer who, what, when, where questions.
- 2.4 I can answer questions about something that I am learning.

3. Use descriptive words to describe people/object;

- 3.1 I can describe people using familiar words, phrases or simple sentences;
- 3.2 I can listen attentively and guess the words which are described using the words which I have learned.

4. Express feeling and need;

- 4.1 I can express basic needs using practiced or memorised words, phrases or in simple question form;
- 4.2 I can express my feelings using practiced or memorised words, phrases or simple sentences;
- 4.3 I can use right words/phrases to express my emotions

Interpretive (Listening, Reading and Viewing) - Phase 2

1. Follow multiple steps of instructions to participate in age-appropriate classroom activities and/or cultural Activities;

- 1.1 I can understand and follow multiple steps of instructions for class activities correctly;

2. Recognize words, phrases and simple sentences with the support of gestures/visuals;

- 2.1 Identify familiar words when they are supported by visuals in informational texts. (e.x,I can identify family member words on a family tree, dates and days of the week, weather, etc.)
- 2.2 I can illustrate the meaning of words/phrases/simple sentences by drawing or selecting pictures;

3. Understand the songs and rhymes learned in class (by acting out)

- 3.1 I can show understanding through oral communication, drawing, movement/action and role play to convey meaning of songs and rhyme

4. Engage with simple narratives learned in class, such as familiar stories, fairy tales.

- 4.1 I can identify the main ideas from the stories;
- 4.2 I can identify people, time, place, and actions from simple narratives through listening
- 4.3 I can recognize the action words in story books,
- 4.4 I can explain actions through pictures/photos
- 4.5 I can demonstrate my understanding of story content by answering question orally.

5. (for Chinese) understand and recognize some characters of self explanatory and associative compounds 指事字、会意字

- 5.1 I can understand and recognize some self explanatory and associative compound characters/words related to the topics.
- 5.2 I can use my prior knowledge of photographic characters to make connections to new characters

Presentational (Writing / Presenting / Speaking) - Phase 2

1. Present basic information about oneself and others related in simple terms

- 1.1 I can introduce my family members to a group orally using photos; (including things they like & dislike, their hobbies etc.)
- 1.2 I can create a family tree in the form of poster

2. Present information about familiar items in my immediate environment.

- 2.1 I can write one character (chung lian) new year scrolls and explain to others the lunar new year legend in English.
- 2.2 I can recite/say the celebration phrases
- 2.3 I can list and present my daily activities orally or in digital written form.
- 2.4 I can list and/or name the stationery used in classroom;

3. Recite short phrases, parts of poems, and rhymes;

- 3. Recite short phrases, parts of poems, and rhymes;

4. Copy the learned characters with correct order

- 4.1 I can follow the stroke sequence to copy /write chinese characters

5. (Korean) recognize and copy words in correct formation order

- 5.1 I can follow the correct order to form words

Interpersonal (Listening and Speaking) - Phase 3

1. Exchange information of familiar topics in my immediate environment

- 1.1 I can ask and respond to simple questions about our favorite activities;
- 1.2 I can ask and respond to simple questions about how often I do my favorite activities using frequency words, such as 'everyday, often, sometimes, seldom, etc.
- 1.3 I can ask simple questions to invite others to join me to do an activity;
- 1.3 I can ask and respond to simple questions about each other's school schedule.
- 1.4 I can ask and respond to simple questions about school facilities and how they are;
- 1.5 I can ask and respond to simple questions about school facility locations.
- 1.6 I can ask/answer simple questions about daily routine/activities.

2. Interact in simple exchanges about things around us

- 2.1 I can ask and answer simple questions about ownership of things and responsibility.
- 2.2 I can request and response to borrow/lend things
- 2.3 I can make casual Invitation and accept or reject the invitation;
- 2.4 I can give a description of the locations on the campus
- 2.4a I can tell someone how to get from one place to another, such as go straight, turn left, or turn right. (phase 4)
- 2.5 (Everyday situations) I can order a meal./ I can make a purchase etc.
- 2.6 I can ask for and give suggestions (for what to wear on particular occasions)
- 2.7 I can understand simple stories through listening with the help of visuals.
- 2.8 I can understand simply stories presented in a picture book by understanding key words and with the help of pictures.
- 2.9 I can exchange information about where to go, such as to the store, the movie theatre, a concert, a restaurant, or when to meet

3. Give and follow simple instructions in order to participate in classroom activities and/or cultural activities

- 3.1 I can understand and participate (acting out) the class game instruction.
- 3.2 I can give an instruction of class game to make my classmate participate.
- 3.3 I can follow the simple instructions to participate in a variety of activities in class Knowledge and skills

Interpretive (Listening, Reading and Viewing) - Phase 3

1. Understand short, simple messages on familiar topics.

- 1.1 I can read and understand school timetable presented in target language;
- 1.2 I can read and understand the calendars presented in target language
- 1.3 I can understand the illustrated weather forecasts on the website in the target language.
- 1.4 I can understand the information from simple birthday invitation cards.
- 1.5 I can read campus map and use it to find the school facility locations
- 1.6 I can understand a simple daily schedule.
- 1.7 I can distinguish a note expressing thanks on a card.
- 1.8 I can sometimes understand questions or statements about myself (How old I am, where I live, what I do in my free time etc.) , family, friends, and classmates.

2. Read and follow instructions to carry out class activities

- 2.1 I can read and follow the instructions given by the teacher
- 2.2 I can follow a step by step instruction with guidance from the teacher

3. Identify people, objects and places based on oral and written descriptions.

- 3.1 I can name / label people, objects and places in written/ oral form
- 3.2 I can sort people, objects and places into different categories
- 3.3 I can understand when someone describes physical descriptions from a photo or an art work.
- 3.4 I can read the labels on objects.

4. (for Chinese) understand and recognize a group of 形声字

- 4.1 I can use my previous knowledge of chinese characters to recognize and predict the sound of the character

5. Identify the topic and related information from simple sentences in short fictional texts

- 5. Identify the topic and related information from simple sentences in short fictional texts

Presentational (Writing / Presenting / Speaking) - Phase 3

1. Present information about familiar topics in my immediate environment using words, phrases, and memorized expressions.

- 1.1 I can tell about my daily activities using words, phrases, and memorized expressions
- 1.2 I can create my own daily schedule using words/phrases
- 1.3 I can create labels which indicate items or locations
- 1.4 I can create signs which guide directions using both word/phrases and symbols;

2. Write brief text messages to others for particular purposes;

- 2.1 I can send text messages to others telling them about weather conditions and what to wear briefly
- 2.2 I can produce simple written messages to remind others about lessons or activities

3. Recite and memorise short meaningful expressions for particular occasions/events

- 3.1 I can deliver happy wishes appropriately in right contexts orally (birthday, weekends, vacations, new year, holidays...)
- 3.2 I can create cards for different occasions. (birthdays, holidays, teachers days, thank you card...)

4. (For Chinese) copy a group of 形声字 with correct orders.

- (For Chinese) copy a group of 形声字 with correct orders.

Interpersonal (Listening and Speaking) - Phase 4

1. Exchange descriptions of places, people, events, and products of the target cultures

- 1.1. I can exchange descriptions of a living place based on its floor plans or photos;
- 1.2. I can ask and respond to questions about the decoration in the house/apartment which express personal and cultural preference;
- 1.3. I can engage in a short conversation to exchange information about a famous person with my peers;
- 1.4. I can ask questions about some products of the target culture;

2. Exchange information about personal events, memorable experiences with peers and/or members of the target cultures.

- 2.1. I can share the details of an important celebration with my peers and find out theirs;
- 2.2. I can exchange information about the school's international week activities in some details with my peers;
- 2.3. I can exchange information with my peers about target culture that I have experienced

3. Communicate ideas, feelings and information on a variety of aspects of everyday topics;

- 3.1. I can express my feeling towards people and objects;
- 3.2. I can express my emotions in response to everyday situations
- 3.3. I can exchange information with my peers about the plastic/glass bottle journey based on my research and the materials that I am exposed to;
- 3.4. I can collaborate with my peers to prepare interview questions for a survey; (Suggest: to create a unit for International weeks, so the four units would be: My house, A celebrity, An International week, and Plastic/glass bottle journey)

Interpretive (Listening, Reading and Viewing) - Phase 4

1. Engage with visual text by identifying ideas, opinions and attitudes and by making a personal response to the text

- 1.1. I can identify some cultural objects and events which are presented in visual texts;
- 1.2. I can interpret the meaning of a cultural object (e.g. the decoration in a traditional house of the target culture); or events (e.g. the birthday or festival celebration);
- 1.3. I can share my personal experience related to the cultural objects or events;

2. Identify main idea and supporting details from visual, audio and simple written texts connected to significant personal or cultural events.

- 2.1. I can listen attentively to my teacher’s class instructions, and follow accordingly;
- 2.2. I can get a main idea from a video clip through listening to the conversation and interpreting the images in the video;
- 2.1. I can listen attentively to an audio recording and identify some factual information;
- 2.2. I can identify main ideas from visual texts (pictures or videos) related to personal or cultural celebrations, and point out some significant details;
- 2.3. I can identify main ideas and specific information from announcements and messages about a cultural event;
- 2.4. Make meaning of a written text with the help of images and answer questions;
- 2.5. Reads text of 200–300 words (Chinese character 150-250) and answers questions

3. Recognize basic aspects of format and author’s purpose for writing ?

- 3.1. I can recognize the basic format of the festival greeting card in the target language.
- 3.2. I can recognize the audience and the register of informal emails/ letters;
- 3.3. I can make simple interpretations of the meaning and purpose of visual texts (for example, signs, posters, picture books, websites) on familiar topics, illustrations with oral and written text messages.

Presentational (Writing / Presenting / Speaking) - Phase 4

1. Tell about a familiar place, person, event, object or experience using phrases and simple sentences.

- 1.1. I can use a series of simple sentences to describe a place;
- 1.2. I can talk about a famous person in some details with visual support e.g pictures, videos;
- 1.3. I can describe each photo that I take from the International week and share them in class;
- 1.3. I can present my experience with the ‘Plastic/glass bottle journey’ using ‘Book creator’ in my class;

2. Write using a basic range of vocabulary, grammatical structures and conventions;

- 2.1. I can use appropriate adjectives to describe a place, a person and an event;
- 2.2. I can use sentences for comparison to describe a place, a person and an event;
- 2.3. I can use proper grammar terms to express my preference;

3. Communicate with a sense of audience.

- 3.1. I can use appropriate address terms and personal tones according to the audience when I write;
- 3.2. I can use simple Imperative sentences to give instructions orally and in written;

4. Organize basic information and use a range of basic cohesive devices

- 4.1. I can use cohesive pronouns (e.g. this, that, these, those) together with gender pronouns (e.g. he, she, it, they) correctly in both speaking and writing..
- 4.2. I can use cohesive conjunctions (e.g. and, but, also, so) to show connections between sentences and ideas in both speaking and writing.
- 4.3. I can arrange scrambled sentences into coherent order based on the understanding of the text;
- 4.4. Produce texts of 100–150 words (100-150 characters) in coherent order.

Interpersonal (Listening and Speaking) Phase 5

1. Ask and respond to questions for clarification.

- 1.1 I can use clarifying questions and expressions to ask for repetition, to confirm what I heard and I can respond to these questions;
- 1.2. I can use probing questions (e.g. why, how questions) to request for an explanation which enhance my understanding;

2. Interact in basic structured exchanges with clear pronunciation and intonation;

- 2.1. I can participate in a dialogue/ role play about a familiar situation, without the use of a model;
- 2.2. I can exchange information about the location of a place based on visual texts given
- 2.3. I can make a presentation with the help of a model or questions and can answer some simple questions posed by the audience.

3. Communicate ideas, feelings and information using a basic range of vocabulary, grammatical structures and conventions;

- 3.1. I can express feelings in response to familiar situations;
- 3.2. I can express my opinions with some justification in group discussion of familiar topics, using simple grammatical structures and some slightly complex ones;
- 3.3. I can engage in simple conversation to exchange ideas and I can support my ideas with some details;
- 3.4. I can use phrases and simple sentences to express particular emotions and feelings in response to familiar situations.

4. Communicate with a purpose and sense of audience;

- 4.1. I can Invite people to an event with a sense of audience;
- 4.2. I know how to accept or refuse an invitation in culturally appropriate ways;
- 4.3. I can ask for clarification to confirm a message and check if a message has been understood.

5. Organize information and ideas and use a range of basic cohesive devices

- 5.1. I can organize information into a coherent order;
- 5.2. I can use transitional words in terms of time and sequence when I tell a story;
- 5.3. I can use subordinating conjunctions (e.g. after, before, --) correctly when I explain a plan or schedule.

Interpretive (Listening, Reading and Viewing) - Phase 5

1. Identify basic facts, messages, main ideas and supporting details from spoken, visual and written texts;

- 1.1. I can listen attentively to a short dialogue in an audio recording, and identify specific information related to who, what, where, when, how in messages;
- 1.2. I can Listen attentively to short speeches and identify main ideas and supporting details.
- 1.3. I can identify ideas, or opinions and attitudes while watching video-clips and short films;
- 1.4. I can Listen and shows understanding of the meaning of a song or a simple story told; .
- 1.5. I can read and interpret maps to find locations and directions.
- 1.6. I can use the search engines and websites in target language to find specific information related to the topics covered in class
- 1.7. I can identify main ideas and details in the posters of familiar topics.

2. Recognize basic aspects of format and author's purpose for writing

- 2.1. I can Recognize the formats of diary entrance, brochure, poster, recipe and menu;
- 2.2. I can identify author's purpose of writing

3. Engage with the written and visual text by identifying ideas, opinions and attitudes and by making a personal response to the text.

- 3.1. I can infer some unfamiliar words from context;
- 3.2. I can refer to personal experience and background knowledge to help understand the texts given.
- 3.3. Reads text of 400–500 words and answers questions about the main ideas and supporting details.

Presentational (Writing / Presenting / Speaking) - Phase 5

1. When speaking, use clear pronunciation and intonation;

- 1.1. I can talk about a place with clear pronunciation;
- 1.2. I can express emotion and attitudes with appropriate intonation;
- 1.3. I can express agreement and disagreement with supporting details.

2. Produce texts with specific purpose and audience;

- 2.1. I can produce posters to promote the celebration of a festival (e.g. Chinese lunar New Year)
- 2.2. I can make a brief oral report about a celebration based on my observation and understanding;
- 2.3. I can produce an illustrated story book based on my experience (e.g. travel, cooking)
- 2.4. I can write messages through email to deliver specific information, involving who, what, where, when and how;
- 2.5. I can write a diary entrance to recall my experience, emotions and attitudes;
- 2.6. I can write about an event with my impression and supporting details;

3. Speak and write using a basic range of vocabulary, grammatical structures and conventions;

- 3.1. I can describe a person (physical appearance and character) in both speaking and writing using various adjectives

- 3.2. I can use correct conventions to produce texts like SMS, email, poster, blog and story;
 - 3.3. I can use the conventions of a successful presentation (format, intonation, content, structure, etc.)
 - 3.4. I can use a range of vocabulary, simple sentences and some slightly complex structures when I write;
 - 3.5. I can use frequency words and phrases (e.g. sometimes, often, everyday, three times a week) accordingly when I talk or write;
4. Organize information and ideas and use a range of basic cohesive
- 4.1. I can use transitional words in terms of time and sequence (e.g. today, last night, three years ago) when I tell or write a story
 - 4.2. I can use subordinating conjunctions (e.g. after, before, --) correctly in contexts
 - 4.3. I can produce a text of 100–150 words (150-200 character) in coherent order.

MYP Language Acquisition (Korean, Mandarin, Spanish)

Criterion A (Listening) - Phase 1

1. Identify basic facts, messages, main ideas and supporting details in everyday situations;

- 1.1 Understand basic classroom instructions and follow accordingly;
- 1.2. Understands basic phrases and expressions for class interactions
- 1.3 Identify factual information related to what, who, where, when and how, while listening to dialogues or short speeches;
- 1.4. Listen to a short speech, and Identify main ideas and supporting details;

2. Recognize basic conventions

- 2.1 Recognize and understand some culturally related non-verbal language includes facial expressions, the tone and pitch of the voice, gestures displayed through body language;
- 2.2. Recognize the format of classroom instructions;
- 2.3. Understand the format of greeting and distinguish the formal and informal ways of greeting and introducing;

3. Engage with the spoken and visual text by identifying ideas, opinions and attitudes and by making a personal response to the text.

- 3.1. Watch video clips and identify ideas, opinions

Criterion B (Viewing and Reading) - Phase 1

1. Identify basic facts, messages, main ideas and supporting details;

- 1.1. Identify basic facts related to what, who, where, when and how from short texts;
- 1.2 identify basic information from simple texts, such as calendar and school timetable presented in target language
- 1.3. Identify basic message from a note, a text message (SMS), a postcard, a festival greeting card, forms and authentic online weather reports
- 1.4. Identify main ideas and supporting details in simple texts in the forms of a blog, an email, and a letter

2. Recognize basic aspects of format and style, and author's purpose for writing

- 2.1. Recognize the author's purpose for writing
- 2.2. Recognize the formats and typical expressions of email/ letter, blog postcard, note, instant messaging applications (Kakaotalk, WeChat, etc.)
- 2.3 Recognize the audience and the register of informal emails/ letters;

3. Engage with visual and written text by identifying ideas, opinions and attitudes and by making a personal response to the text.

- 3.1 Make meaning of a written text with the help of images and answer questions;
- 3.2. Makes simple interpretations of the meaning and purpose of visual texts (for example, signs, posters, picture books, websites) on familiar topics, illustrations with oral and written text messages
- 3.3. Lists some features of the visual text (for example, colour, text layout, sound effects)
- 3.4. Arrange scrambled sentences into coherent order based on the understanding of the text;
- 3.5. Make simple personal comments on the messages and ideas presented in texts;
- 3.6. Identify opinions and attitudes presented in visual or written texts;
- 3.7. Read and respond to simple questions or to complete activities about the texts up to 200-300 words (Chinese characters 150-250)

Criterion C (Speaking and Writing) - Phase 1

1. Respond appropriately to simple short phrases

Speaking

- 1.1 Greet and respond to different audiences in different contexts, and for different purpose, using appropriate terms of address and forms of gestures;
- 1.2. Understand and respond to basic classroom instructions;
- 1.3 Introduce oneself and family members in the forms of oral presentation with a prompt of pictures

1. Respond appropriately to simple short phrases

Writing:

- 1.1 Produce text messages to greet or reply to greetings from different audiences in different contexts, and for different purpose, being able to use appropriate terms of address.
- 1.2. Fill in forms with personal information
- 1.3 Write simple cards on special occasions (like in festivals).
- 1.4 Write a short personal recount with timelines;
- 1.5 Create a family tree of family members and relatives

2. interact in simple and rehearsed exchanges, using verbal and non-verbal language

Spanish

Speaking

- 2.1. Ask and answer questions to exchange personal information including: names, nationalities/countries, age, birthdays(date), birthplace, and place to live, etc
- 2.2. Ask and answer questions about a cultural event, like New Year celebration in the target culture (not for spanish)

2. interact in simple and rehearsed exchanges, using verbal and non-verbal language

Spanish

Writing:

- 2.1. Exchange information of everyday routines through text messages (SMS)
- 2.2. Write an informal letter to a pen pal to exchange personal information with proper register;

3. Use basic phrases to communicate ideas, feelings and information on a variety of aspects of everyday topics

Speaking

- 3.1. Names familiar objects, people and uses words for classroom, school and home routines;
- 3.2. Makes simple statements to describe family members, everyday routines.
- 3.3. Ask and reply about the time and details of school time table;
- 3.4. Participates in a conversation/role play about an everyday situation using a model;
- 3.5. Makes a simple presentation with the help of visual aids and a model.
- 3.6. Acquire good/services and make a simple purchase in the form of role play;

3. Use basic phrases to communicate ideas, feelings and information on a variety of aspects of everyday topics

Writing:

- 3.1. Labels familiar objects, people and writes words for classroom, school and home routines;
- 3.2. Makes simple statements to describe family members, everyday routines.
- 3.3. Produce one's own timetable in target language
- 3.4. Write short notes about a cultural event, like New Year celebration in the target culture (not in Spanish)

4. Communicate with a sense of audience.

Speaking

- 4.1. Use some aspects of register in informal oral communication with consideration of the audience.
- 4.2. Use some aspects of register in formal oral communication with consideration of the audience.

4. Communicate with a sense of audience.

Writing:

- 4.1. Use some aspects of register in informal written communication with consideration of the audience, such as SMS, and diary entrance.
- 4.2. Use some aspects of register in formal written communication, such as Greeting cards, and letters.

Criterion D (Speaking and Writing) - Phase 1

1. Write or speak using a basic range of vocabulary, grammatical structures and conventions. When speaking, use clear pronunciation and intonation

Speaking

- 1.1. Uses appropriate terms of address, gestures and greetings
- 1.2. Use language appropriate to a very limited range of interpersonal and cultural contexts, such as: greetings, introducing, asking questions to obtain information, expressing good wishes etc;
- 1.3. Use clear pronunciation and intonation;
- 1.4. Use a basic range vocabulary to express simple ideas;
- 1.5. Use simple grammatical structures to give statements and to ask 'yes' or 'no' questions and questions about what, when, where, who, how ;

1. Write or speak using a basic range of vocabulary, grammatical structures and conventions.

Writing:

- 1.1. Use a basic range vocabulary to provide simple information and to express simple ideas;
- 1.2. Use simple grammatical structures to give simple statements;
- 1.3. Ask and respond to 'yes' or 'no' questions in different ways;
- 1.4. Ask and respond to questions involving what, when, where, who, how ;
- 1.5. Produce a text of 100–150 words (100-150 characters) in coherent order;

2. Organize basic information and use a range of basic cohesive devices

Speaking

- 2.1. Use cohesive pronouns (e.g. this, that, these, those) together with gender pronouns (e.g. he, she, it, they) correctly in speaking.
- 2.2. Use cohesive conjunctions (e.g. and, but, also, so, furthermore, because, therefor) to show connections between sentences and ideas in speaking.

2. Organize basic information and use a range of basic cohesive devices

Writing:

- 2.1. Use cohesive pronouns (e.g. this, that, these, those) together with gender pronouns (e.g. he, she, it, they) correctly in writing;
- 2.2. Use cohesive conjunctions (e.g. and, but, also, so, furthermore, because, therefor) to show connections between sentences and ideas in writing.

3. Use language to suit the context.

Writing:

- 3.1. Uses appropriate terms of address in contexts;
- 3.2. Use appropriate expressions in a limited range of interpersonal and cultural interactions, such as: greetings, introducing, asking questions to obtain information, expressing good wishes etc;

Criterion A (Listening) - Phase 2

1. Show understanding of messages, main ideas and supporting details

- 1.1. Understand and follow classroom routines and two-step instructions;
- 1.2. Listen to short dialogues and identify specific information related to who, what, where, when, how in messages;
- 1.3. Listen and show understanding of the meaning of a song or a simple story told;
- 1.4. Listen to short speeches and identify main ideas and supporting details.

2. Recognize basic conventions

- 2.1. Recognize the formats of requesting information, inviting, and clarifying during oral interactions;
- 2.2. Recognize some register of formal or informal oral communication, such as address terms, tones, and some fixed expressions from spoken texts;

3. Engage with the spoken and visual text by identifying ideas, opinions and attitudes and by making a personal response to the text.

- 3.1. Understands phrases and expressions for familiar situations and uses them to interact;
- 3.2. Listen to short speeches, identify speakers' opinions about and attitudes towards familiar issues ;
- 3.3. Uses images to help make meaning of oral text
- 3.4. Watch video-clips and identify ideas, opinions and attitudes.

Criterion B (Viewing and Reading) - Phase 2

1. Identify basic facts, main ideas and supporting details, from visual and written texts, and draw conclusions

- 1.1. Identify factual information from a personal recount and draw conclusions;
- 1.2. Identify key information from announcements and messages related to daily activities and social events;
- 1.3. Read and interpret maps to find locations and directions.
- 1.4. Use search engines and websites in target language to find specific information related to the topics covered in class
- 1.5. Identify main ideas and details in posters.
- 1.6. Identify the main ideas and supporting details in blogs and articles

2. Recognize basic conventions including aspects of format and style, and author’s purpose for writing

- 2.1. List some features of the visual text (for example, colour, text layout, sound effects, shape, sequence)
- 2.2. Recognize basic conventions of the blogs, email, letter, diary entrance, brochure, poster, recipe, menu;

3. Engage with the written and visual text by identifying ideas, opinions and attitudes and by making a personal response to the text.

- 3.1. Infer unfamiliar words from contexts
- 3.2. Refer to personal experience and background knowledge to enhance understanding of the texts given;
- 3.3. Makes simple interpretations of the meaning and purpose of various print-based, digital and electronic texts (for example, cartoons, simple advertisements)
- 3.4. Uses images to help make meaning of written text;
- 3.5. Reads text and classifies, describes, explains, sequences, gives examples;
- 3.6. Reads text of 400–500 words and answers questions about main ideas and supporting details.

Criterion C (Speaking and Writing) - Phase 2

1. Respond appropriately to spoken and/or written and/or visual text in a limited range of familiar situations;

Speaking:

- 1.1. Ask and respond to questions for exchange of information within familiar situations;
- 1.2. Respond to the request and clarification for information within familiar situations;
- 1.3. Describe places in terms of location based on visual texts given

1. Respond appropriately to spoken and/or written and/or visual text in a limited range of familiar situations;

Writing:

<ul style="list-style-type: none"> • 1.1. Produce text messages to invite others to do something together; • 1.2. Produce text messages in response to an invitation - accept or refuse; • 1.3. Describe people or places based on visual texts given. • 1.4. Communicate information containing relevant ideas and some details in familiar situations; • 1.5. Request and provide information in familiar situations;
<p>2. Interact in basic structured exchanges on a limited variety of aspects within familiar situations;</p> <p>Speaking:</p>
<ul style="list-style-type: none"> • 2.1. Invite people to an event or doing something fun together, keeping in mind the context and target audience; • 2.2. Accept or refuse an invitation; • 2.3. Ask for clarification to confirm a message and check if a message has been understood. • 2.4. Create simply interview questions and conduct an interview;
<p>2. Interact in basic structured exchanges on a limited variety of aspects within familiar situations;</p> <p>Writing:</p>
<ul style="list-style-type: none"> • 2.1. Writes a dialogue/role play about a familiar situation, with and without a writing frame or model; • 2.2. Writes a dialogue/role play about a familiar situation without a writing frame or model;
<p>3. Use phrases to communicate ideas, feelings and information in familiar situations</p> <p>Speaking:</p>
<ul style="list-style-type: none"> • 3.1. Describes personal experiences and exchanges ideas about topics of personal interest and everyday life 3.2. Use phrases and expressions for familiar situations to interact; Express particular emotions and feelings towards particular situation; • 3.3. Express opinion and preference using basic formulas appropriate to context and audience; • 3.4. Makes a presentation with the help of a model or questions and answer some simple questions posed by the audience.
<p>3. Use phrases to communicate ideas, feelings and information in familiar situations</p> <p>Writing:</p>
<ul style="list-style-type: none"> • 3.1. Expresses feelings and opinions in writing postcards; • 3.2. Expresses feelings and opinions in writing letter or email; • 3.3. Describes personal experiences and ideas about topics of personal interest and everyday life; • 3.4. Produce a text of 100–150 words (100-150 characters) in coherent order;
<p>4. Communicate with a sense of audience.</p> <p>Writing:</p>
<ul style="list-style-type: none"> • 4.1. Write in formal or in formal way with consideration of the audience.
<p>Criterion D (Speaking and Writing) - Phase 2</p>

1. Write using a basic range of vocabulary, grammatical structures and conventions;

Speaking

- 1.1. Use a basic range of vocabulary accurately;
- 1.2. Use appropriate adjectives and adverbs to describe people (physical appearance and character)
- 1.3. Use frequency words and phrases (e.g. sometimes, often, everyday, three times a week) accordingly;
- 1.4. Use simple sentences and some slightly complex structures when speaking.

1. Write using a basic range of vocabulary, grammatical structures and conventions;

Writing

- 1.1. Describe people (physical appearance and character) using appropriate adjectives and adverbs in writing;
- 1.2. Use frequency words and phrases (e.g. sometimes, often, everyday, three times a week) accurately in contexts;
- 1.3. Write 100–150 words (150-200 Chinese characters)
- 1.4. simple sentences and some slightly complex structures when writing

2. When speaking, use clear pronunciation and intonation;

Speaking

- 2.1. Speak using clear pronunciation;
- 2.2. Speak using proper intonation to express attitudes and emotions;

3. Organize information and ideas and use a range of basic cohesive devices;

Speaking

- 3.1. Use transitional words in terms of time and sequence (e.g. today, last night, three years ago) when describing an event or telling a story;
- 3.2. Use subordinating conjunctions (e.g. after, before, --) to organize information;

3. Organize information and ideas and use a range of basic cohesive devices;

Writing

- 3.1. Organize information using transitional words in terms of time and sequence (e.g. today, last night, three years ago);
- 3.2. Organize information using subordinating conjunctions (e.g. after, before, --) correctly in contexts

4. Use language to suit the context.

Speaking

- 4.1. Speak with purpose and with the sense of audience;
- 4.2. Speak with proper expressions in formal or informal contexts.

4. Use language to suit the context.

Writing

- 4.1. Write with clear purpose and with the sense of audience;
- 4.2. Choose proper expressions in formal or informal contexts.

Criterion A (Listening) - Phase 3

1. Show understanding of information, main ideas and supporting details, and draw conclusions in familiar and some unfamiliar situations

- 1.1. Understand and follows multi-step directions/instructions;
- 1.2. Listen attentively and respond in small-group and whole-class interactions;
- 1.3. Pick out main points in a story, song, or short informational text told;
- 1.4. Listen attentively to short talks and draw conclusions;
- 1.5. Listen to instructions and identify the procedures involved;

2. Understand conventions

- 2.1. Recognize and understand the convention of instructional spoken texts;
- 2.2. Recognize and understand the formal or informal way of giving suggestions/advices;

3. Engage with the spoken and visual text by identifying ideas, opinions and attitudes and by making a response to the text based on personal experiences and opinions.

- 3.1. Listen attentively and Interact in pair work, information gap and role-play activities;
- 3.2. Listen to audio tapes or videos and identify main ideas and supporting details;
- 3.3. Listen to short speeches and identify opinions and attitudes;

Criterion B (Viewing and Reading) - Phase 3

1. Show understanding of information, main ideas and supporting details, and draw conclusions;

- 1.1. Understand messages presented in visual texts;
- 1.2. Understand main ideas and supporting details in visual texts presented with written text;
- 1.3. Understand specific information, ideas, opinions and attitudes, presented in visual and written texts;
- 1.4. Understand main ideas and supporting details, and draw conclusions from written texts;

2. Understand basic conventions including aspects of format and style, and author's purpose for writing;

- 2.1. Understand aspects of format and style in texts
- 2.2. Identifies some of the features of the text chosen for a purpose, such as blogs, recipes, and articles;

3. Engage with the visual text by identifying ideas, opinions and attitudes and by making a response to the text based on personal experiences and opinions.

- 3.1. Understands meaning of informational texts using visual images (for example, in brochures, news items, posters) and explains the effect and purpose of the visual elements;
- 3.2. Identify a point of view and supporting details in a article;
- 3.3. Use one’s own words to explain some of the words or expressions from the texts;
- 3.4. Find one’s own examples to share understanding of the ideas, opinions presented in the texts;
- 3.5. Connect the from the text with one’s personal knowledge or experience through comparison;
- 3.6. Identify and interpret key and supporting actions in developmentally appropriate narratives such as personal anecdotes, familiar stories, fairy tales and unfamiliar narratives based on familiar themes.
- 3.7. Reads text of 600–700 words and understand specific information, ideas, opinions and attitudes.

Criterion C (Speaking and Writing) - Phase 3

1. Respond appropriately to spoken and /or written, and/or visual text

Speaking

- 1.1. Request and provide information in familiar and some unfamiliar situations;
- 1.2. Request and provide suggestions/advices or recommendations in familiar and some unfamiliar situations;
- 1.3. Express ideas with supporting details
- 1.4. Interact in small group discussion and response to others’ opinions, and express one’s own.

1. Respond appropriately to spoken and /or written, and/or visual text

Writing:

- 1.1. Exchange text messages for information within familiar situations;
- 1.2. Write a reply email in response to the request for advice;
- 1.3. Write a description of a place based on visual texts.

2. Interact in rehearsed and unrehearsed exchanges on a limited variety of aspects within familiar and some unfamiliar situations

Speaking

- 2.1. Conduct a survey related to issues of health and use of information technology;
- 2.2. Make a presentation of a learned topic and answer some follow-up questions by the audience;

2. Interact in rehearsed and unrehearsed exchanges on a limited variety of aspects within familiar and some unfamiliar situations

Writing:

- 2.1. Create questionnaire for a survey;
- 2.2. Write a report based on a survey;

3. Express ideas and feelings, and communicate information in familiar and some unfamiliar situations

Speaking

- 3.1. Give oral instructions on how to make or do something using phrases and simple sentences (basic commands).
- 3.2. Give suggestions with reasons and examples;
- 3.3. Give instructions for direction and locations;
- 3.4. Expresses thoughts, ideas and opinions in a discussion with others about topics of personal interest and pertinent to everyday life;

3. Express ideas and feelings, and communicate information in familiar and some unfamiliar situations

Writing:

- 3.3. Writes short narratives or recounts;
- 3.4. Keeps a journal or diary that express thoughts, feelings and opinions about topics of personal interest and pertinent to everyday life;
- 3.4. Produce a text of 200–250 words (250-300 characters) in coherent order;

4. Communicate with a sense of audience and purpose

Writing:

- 4.1. Write with a sense of register;
- 4.2. Write with a sense of purpose;
- 4.3. Write with a sense of style.

Criterion D (Speaking and Writing) - Phase 3

1. Speak and write using a range of vocabulary, grammatical structures and conventions; when speaking, use clear pronunciation and intonation

Speaking:

- 1.1. Speak using a range of vocabulary and complex grammatical structures
- 1.2. Speak Using idiomatic and some colloquial expressions;
- 1.3. Speak using appropriate register in formal and informal oral communication;
- 1.4. Engage actively in oral production using comprehensible pronunciation and intonation/ correct tone.

1. Speak and write using a range of vocabulary, grammatical structures and conventions; when speaking, use clear pronunciation and intonation

Writing:

- 1.1. Write using a range of vocabulary and complex grammatical structures;
- 1.2. Write using idiomatic and some colloquial expressions;
- 1.3. Write using appropriate register in formal and informal written communication;
- 1.4. Write using language accurately and effectively;

2. Organize information and ideas and use a range of basic cohesive devices

Speaking:

- 2.1. Organize speech information coherently;
- 2.2. When delivering a speech, use a range of cohesive devices including those for reformulation, e.g. in other words, that is (to say), rather to put it more (simply) etc;

2. Organize information and ideas and use a range of basic cohesive devices

Writing:

- 2.1. Produce texts with coherent order;
- 2.2. Write using a wide range of cohesive devices including those for reformulation, e.g. in other words, that is (to say), rather to put it more (simply) etc.

3. Use language to suit the context.

Speaking:

- 3.1. Use language appropriate to a range of spoken interpersonal and cultural contexts;
- 3.2. Use language appropriate for a range of purposes and audiences;

3. Use language to suit the context.

Writing:

- 3.1. Use language appropriate to a range of interpersonal and cultural contexts, and for a range of purposes and audiences;
- 3.2 Use language appropriate for a range of purposes and audiences

Criterion A (Listening) - Phase 4

1. Construct meaning and draw conclusions from information, main ideas and supporting details

- 1.1. Listen attentively and follow main points in an announcement;
- 1.2. Listen to others responsively by asking questions about some concrete and abstract topics
- 1.3. Listen to a conversation or a speech and take notes for main idea and factual information;
- 1.4. Listen to an advertisement and obtain detailed information

2. Interpret conventions

- 2.1. Recognize the formats of news broadcasting , TV commercial, video blogs, movie clips; Ted-talk style of presentation, TV interviews, Talk show, public speech; music video clip; Songs

3. Engage with the spoken and visual text by identifying ideas, opinions and attitudes and by making a response to the text based on personal experiences and opinions.

- 3.1. Listens to a story told and shows understanding by anticipating or predicting events and ideas;
- 3.2. Verbalizes thinking and explains reasons for a story or information heard about topics of personal and some of global significance;

Criterion B (Viewing and Reading) - Phase 4

1. Construct meaning by identifying stated and implied information, main ideas and supporting details, and draw conclusions

- 1.1. Construct meaning from information presented in visual texts
- 1.2. Construct meaning from main ideas and supporting details, and draw conclusions from visual texts presented with written text

2. Interpret basic conventions including aspects of format and style, and author’s purpose for writing

- 2.1 Interpret visual conventions, such as color, shapes, composition, lighting, symbolism used in texts;
- 2.2. Understand and explain how the conventions used influence our attitude and opinions (for example, in photos with text, news reports with images, excerpts of films, websites)
- 2.3. Interpret aspects of format and style in written texts;
- 2.4. Understand and explains why some of the features of the text have been chosen for a particular purpose and audience;

3. Engage with the written and visual text by identifying ideas, opinions and attitudes and by making a response to the text based on personal experiences and opinions.

- 3.1. Finds your own examples to share understanding of author’s point of view;
- 3.2. Makes inferences from explicit and implicit information;
- 3.3. Shows an understanding of a range of texts by reading and responding to questions or completing activities about the texts;
- 3.4. Reads texts and, for example, paraphrases, summarizes, restates, predicts, interprets, illustrates, reports, concludes
- 3.5. Reads text of 800–900 words and interprets specific information, ideas, opinions and attitudes.

Criterion C (Speaking and Writing) - Phase 4

1. Respond appropriately to spoken and/or written and/or visual text

Speaking:

- 1.1. Paraphrase a new word, a new phrase, a paragraph or a message;
- 1.2. Summarize information from a spoken text;
- 1.3. Make a short speech based on a visual text;
- 1.4. Verbalizes thinking and explains causes and effects regarding topics of personal and some of global issues;

1. Respond appropriately to spoken and/or written and/or visual text

Writing:

<ul style="list-style-type: none"> • 1.1. Translate an advertisement from other language and write a comment about the ad in terms of its persuasiveness; • 1.2. Write a speech draft in response to a particular issue or a problem; • 1.3. Write an informal letter or a formal letter in response to an issue or a problem; • 1.4. Write a news article based on information given; • 1.5. Write a interview draft based on an interview;
<p>2. Engage in rehearsed and unrehearsed exchanges to share ideas on topics of personal and global significance</p> <p>Speaking:</p>
<ul style="list-style-type: none"> • 2.1 Participate in a group discussion for topics in regards to technology, health and environment issues; Gives a talk or presentation to small and large groups (about a song favored, book read or a film watched) and answers unprepared questions posed by the audience.(phase 3) • 2.2. Give a talk or presentation about a place (including location, facilities) based on a planning map or pictures and answers unprepared questions posed by the audience; • 2.3. Conduct an interview for topics of personal and global significance; • 2.4. Present an advertisement created by one’s own and explain to the audience about its purpose and the strategies used to achieve the purpose;
<p>2. Engage in rehearsed and unrehearsed exchanges to share ideas on topics of personal and global significance</p> <p>Writing:</p>
<ul style="list-style-type: none"> • 2.1. Prepare notes in writing for a debate; • 3.1. Write a simple cause–effect essay and newspaper article, expressing thoughts and explaining reasons about topics of personal and some of global significance • 3.2. Produce texts of 200–250 words (270-330 characters);
<p>3. Express ideas and feelings, and communicate information in simple and complex texts</p> <p>Speaking:</p>
<ul style="list-style-type: none"> • 3.1. Request and provide advice/suggestions in a range of spoken contexts; • 3.2. Ask and respond to questions for clarification ?; • 3.3. Express and defend a point of view orally; • 3.4. Counteract an argument in a debate;
<p>3. Express ideas and feelings, and communicate information in simple and complex texts</p> <p>Writing:</p>
<ul style="list-style-type: none"> • 3.1. Write a simple cause–effect essay and newspaper article, expressing thoughts and explaining reasons about topics of personal and some of global significance • 3.2. Produce texts of 200–250 words (270-330 characters);
<p>4. Communicate with a sense of audience and purpose.</p> <p>Speaking:</p>

<ul style="list-style-type: none"> • 4.1. Deliver a speech with a specific communicative purpose to convince/suggest/warn; • 4.2. Use appropriate register in formal and informal oral communication;
<p>4. Communicate with a sense of audience and purpose.</p> <p>Writing:</p>
<ul style="list-style-type: none"> • 4.1. Write with a clear purpose and an effort to achieve the purpose ; • 4.2. Produce a text with proper register
<p>Criterion D (Speaking and Writing) - Phase 4</p>
<p>1. Write and/or speak using a range of vocabulary, grammatical structures and conventions; when speaking, use clear pronunciation and intonation</p> <p>Speaking:</p>
<ul style="list-style-type: none"> • 1.1. Use a range of vocabulary and expressions to tell a story, to participate in group discussion and debates; • 1.2. Use some complex structures to express some complex ideas; • 1.3. Use appropriate conventions for delivering a speech, a keynote presentation; conducting an interview and engaging in a debate; • 1.4. Engage actively in oral production using comprehensible pronunciation and intonation/ correct tone. • 1.5. Participate in a group discussion, observing turn taking, interrupting, and ending.
<p>1. Write and/or speak using a range of vocabulary, grammatical structures and conventions; when speaking, use clear pronunciation and intonation</p> <p>Writing:</p>
<ul style="list-style-type: none"> • 1.1. Use a range of vocabulary and expressions when writing a story; • 1.2. Use some complex structures to express some complex ideas; • 1.3. Use appropriate conventions to write a speech draft; • 1.4. Follow debate format to prepare notes;
<p>2. Organize information and ideas into a structured text; use a wide range of cohesive devices;</p> <p>Speaking:</p>
<ul style="list-style-type: none"> • 2.1 Use cohesive devices of Inference to organize an argument, (e.g. If not,... otherwise then, In (that) case, that implies' • 2.2. Use cohesive devices for summary, e.g. in all, I in short, on the whole, in brief, in conclusion, to sum up etc; • 2.3. Present a speech with coherent order.
<p>2. Organize information and ideas into a structured text; use a wide range of cohesive devices;</p> <p>Writing:</p>

<ul style="list-style-type: none"> • 2.1 Use cohesive devices of Inference to organize an argument, (e.g. If not,... otherwise then, In (that) case, that implies' • 2.2. Use cohesive devices for summary, e.g. in all, I in short, on the whole, in brief, in conclusion, to sum up etc. • 2.3. Produce texts with coherent order.
3. Use language to suit the context
<ul style="list-style-type: none"> • Use language to suit the context

Criterion A (Listening) - Phase 5

1. Analyse and draw conclusions from Information, main ideas and supporting details in social and some academic situations;

- 1.1. Listen to announcements and follow the main points;
- 1.2. Listen to news reports, identify their perspectives and draw conclusions based on the information;
- 1.3. Listen to talk shows, identifying and analyzing the factors for their entertaining effects;
- 1.4. Listen to speeches and analyze how effective of the supporting details to the main points;
- 1.5. Watch TV interviews, and analyse the information and draw conclusions;
- 1.6. Listens to a variety of sources for pleasure and information, and shows understanding by reporting back, summarizing and interpreting what was heard

2. Analyse conventions;

- 2.1. Recognize and analyse the conventions of the news reports in comparison with that of TV interviews, announcements and stories;
- 2.2. Recognize and analyse the conventions of speeches to see how the conventions help achieve the speakers' purpose;
- 2.3. Identify the conventions of the different types of texts and analyse how the conventions connected to the audience, purpose and contexts of the texts;

3. engage with the spoken and visual text by analysing ideas, opinions and attitudes and by making a response to the text based on personal experiences and opinions from a global perspective.

- 3.1. Listens to text read or viewed, makes inferences and draws conclusions about events and ideas related to topics of personal significance
- 3.2. Listens to text read or viewed, makes inferences and draws conclusions about events and ideas related to topics of global significance ;
- 3.3. Listens to a variety of sources for pleasure and information, and shows understanding by reporting back, summarizing and interpreting what was heard;

Criterion B (Viewing and Reading) - Phase 5

1. Analyse and draw conclusions from information, main ideas and Supporting details;

- 1.1. Analyze information presented in visual texts
- 1.2. Analyze main ideas and supporting details, and draw conclusions from visual texts presented with written text;

-
- 1.3. Shows an understanding of a range of texts by reading and responding to questions or completing activities about the texts;
 - 1.4. Analyze a text of argumentation to see how the writer defends his point of view as well as attacking others' point of view;
2. Analyse basic conventions including aspects of format and style, and author's purpose for writing;
- 2.1. Explores how the conventions used in visual texts create literal and symbolic meaning ;
 - 2.2. Analyze aspects of format and style in newspaper reports;
 - 2.3. Analyze the format and style in short stories;
 - 2.4. Analyze the Rhythm and rhyme in poetry;
3. Engage with the written and visual text by analysing ideas, opinions and attitudes and by making a response to the text based on personal experiences and opinions from a global perspective.
- 3.1. Views critically and explains why some visual texts are effective and others not (for example, in advertising, posters, newspaper reports)
 - 3.2. Students finds his or her own examples to share understanding by describing the effect and meaning;
 - 3.3. Understand and analyze the meaning of imagery used in poetry;
 - 3.4. Understand and analyze the structure of the poetry to see how they help create meaning;
 - 3.5. Read texts and make inferences and draws conclusions about events and ideas related to topics of personal and global significance
 - 3.6. Read text of 900–1,000 words and analyses main ideas, opinions and attitudes, and details in the text;
 - 3.7. Reads texts and, for example, breaks down, compares and contrasts, deduces, infers, illustrates, reorganizes, distinguishes
 - 3.8. List and explain the effect of the use of various stylistic devices, such as metaphor, repetition, hyperbole, and rhetorical questions in the text.

Criterion C (Speaking and Writing) - Phase 5

1. Respond appropriately to spoken and/or written and/or visual text in a range of social and some academic situations;

Speaking:

- 1.1. Engage in conversations to share ideas, reflections and opinions;
- 1.2. Respond to familiar situations, providing information and personal point of views;
- 1.3. Respond to unfamiliar situations, asking questions, and providing information based on research;

1. Respond appropriately to spoken and/or written and/or visual text in a range of social and some academic situations;

Writing:

- 1.1. Write one's own story that share significant personal experience;
- 1.2. Write a story of a person who has a rich international experience based on an interview;
- 1.3. Write a blog in response to an con

2. engage in rehearsed and Unrehearsed exchanges to share ideas on a range of topics of personal and global significance

Speaking:

- 2.1. Generate interview questions and conduct an interview to collect information for the purpose of story writing;
- 2.2. Make a presentation with focus on a global issue, followed by answering questions posted by audience;
- 2.3. Participate in a Socratic seminar based on a text preset;

3. express ideas, opinions and feelings, and communicate information in a wide range of situations;

Speaking:

- 3.1. Express opinions based on reading and analyzing a written text;
- 3.2. Express ideas of writing a story;
- 3.3. Participate in a debate over a controversial issue.

4. Communicate with a sense of register, purpose and style.

- Communicate with a sense of register, purpose and style.

Criterion D (Speaking and Writing) - Phase 5

Speaking-Writing:

- 1. write or speak using a range of vocabulary, complex grammatical structures and conventions; when speaking, use intonation and fluency;
- 2. Organize information and ideas; use a wide range of cohesive devices
- 3. use language to suit the context.
- Use language appropriate to a range of spoken interpersonal and cultural contexts, and for a range of purposes and audiences
- Use appropriate register in formal and informal oral communication
- Use language accurately and effectively
- Engage actively in oral production using comprehensible pronunciation and intonation/ correct tone.
- Uses idiomatic and some colloquial expressions 300-400 words(350-500 characters) Use cohesive devices for Reformulation, e.g. in other words, that is (to say), rather to put it more (simply) etc.



Makerspace (PK- Grade 5)



ISTE: Educational Technology (2016)

4. Innovative Designer

Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions. Students:

- a. know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.
- b. select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.
- c. develop, test and refine prototypes as part of a cyclical design process.
- d. exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems.

5. Computational Thinker

Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions. Students:

-
- | | |
|--|--|
| | <ul style="list-style-type: none">• a. formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic thinking in exploring and finding solutions.• b. collect data or identify relevant data sets, use digital tools to analyze them, and represent data in various ways to facilitate problem-solving and decision-making.• c. break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.• d. understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions. |
|--|--|



Mathematics



AERO: PreK

Counting (CC)

Know number names and the count sequence.

- AERO.PK.CC.1 Count verbally to 10 by ones.
- AERO.PK.CC.2 Recognize the concept of just after or just before a given number in the counting sequence up to 10.
- AERO.PK.CC.3 Identify written numerals 0-10.

Count to tell the number of objects.

- AERO.PK.CC.4 Understand the relationship between numbers and quantities; connect counting to cardinality.
- AERO.PK.CC.4a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object
- AERO.PK.CC.4b Recognize that the last number name said tells the number of objects counted.
- AERO.PK.CC.4c Recognize that each successive number name refers to a quantity that is one larger.
- AERO.PK.CC.5 Represent a number (0-5, then to 10) by producing a set of objects with concrete materials, pictures, and/or numerals (with 0 representing a count of no objects).
- AERO.PK.CC.6 Recognize the number of objects in a set without counting (Subitizing). (Use 0- 5 objects)

Compare numbers.

- AERO.PK.CC.7 Explore relationships by comparing groups of objects up to 10, to determine greater than/more or less than, and equal to/same Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies (includes groups with up to 5 objects).

Numbers in Base Ten (NBT)

Work with numbers 11-19 to gain foundations for place value

- AERO.PK.NBT.1 Investigate the relationship between ten ones and ten

Operations Algebraic Thinking (OA)

Understand addition, and understand subtraction.

- AERO.PK.OA.1 Explore addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, or verbal explanations.
- AERO.PK.OA.2 Decompose quantity (less than or equal to 5, then to 10) into pairs in more than one way (e.g., by using objects or drawings).
- AERO.PK.OA.3 For any given quantity from (0 to 5, then to 10) find the quantity that must be added to make 5, then to 10, e.g., by using objects or drawings.

Measurement and Data (MD)

Describe and compare measurable attributes

- AERO.PK.MD.1 Describe measurable attributes of objects, such as length or weight.

Relate addition and subtraction to length

- AERO.PK.MD.2 Directly compare two objects with a measurable attribute in common, using words such as longer/shorter; heavier/lighter; or taller/shorter.

Classify objects and count the number of objects in each category.

- AERO.PK.MD.3 Sort objects into given categories

Represent and interpret data.

- AERO.PK.MD.4 Compare categories using words such as greater than/more, less than, and equal to/same.

Geometry (G)

Identify and describe shapes

- AERO.PK.G.1 Match like (congruent and similar) shapes.
- AERO.PK.G.2 Group the shapes by attributes.
- AERO.PK.G.3 Correctly name shapes (regardless of their orientations or overall size).

Analyze, compare, create, and compose shapes.

- AERO.PK.G.4 Describe three-dimensional objects using attributes.
- AERO.PK.G.5 Describe three-dimensional objects using attributes.
- AERO.PK.G.6 Compose and describe structures using three-dimensional shapes. Descriptions may include shape attributes, relative position, etc

Mathematical Practices

1. Make sense of problems and persevere in solving them.

- Use both verbal and nonverbal means, these students begin to explain to themselves and others the meaning of a problem, look for ways to solve it, and determine if their thinking makes sense or if another strategy is needed.

2. Reason abstractly and quantitatively.

- Begin to use numerals to represent specific amount (quantity) Begin to draw pictures, manipulate objects, use diagrams or charts, etc. to express quantitative ideas such as a joining situation Begin to understand how symbols (+, -, =) are used to represent quantitative ideas in a written format.

3. Construct viable arguments and critique the reasoning of others.

- Begin to clearly express, explain, organize and consolidate their math thinking using both verbal and written representations. Begin to learn how to express opinions, become skillful at listening to others, describe their reasoning and respond to others' thinking and reasoning. Begin to develop the ability to reason and analyze situations as they consider questions such as, "Are you sure...?", "Do you think that would happen all the time...?", and "I wonder why...?"

4. Model with mathematics.

- Begin to experiment with representing real-life problem situations in multiple ways such as with numbers, words (mathematical language), drawings, objects, acting out, charts, lists, and number sentences.

5. Use appropriate tools strategically.

- Begin to explore various tools and use them to investigate mathematical concepts. Through multiple opportunities to examine materials Experiment and use both concrete materials (e.g. 3-dimensional solids, connecting cubes, ten frames, number balances) and technological materials (e.g., virtual manipulatives, calculators, interactive websites) to explore mathematical concepts.

6. Attend to precision.

- Begin to express their ideas and reasoning using words. Begin to describe their actions and strategies more clearly, understand and use grade-level appropriate vocabulary accurately, and begin to give precise explanations and reasoning regarding their process of finding solutions.

7. Look for and make use of structure. (Deductive Reasoning)

- Begin to look for patterns and structures in the number system and other areas of mathematics.

8. Look for and express regularity in repeated reasoning. (Inductive Reasoning)

- Begin to notice repetitive actions in geometry, counting, comparing, etc.

AERO: Kindergarten

Counting (CC)

Know number names and the count sequence.

- AERO.K.CC.1 Count to 100 by ones and by tens.
- AERO.K.CC.2 Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
- AERO.K.CC.3 Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects)

Count to tell the number of objects.

- AERO.K.CC.4 Understand the relationship between numbers and quantities; connect counting to cardinality
- AERO.K.CC.4a When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
- AERO.K.CC.4b Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
- AERO.K.CC.4c Understand that each successive number name refers to a quantity that is one larger.
- AERO.K.CC.5 Count to answer how many? questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.

Compare numbers.

- AERO.K.CC.6 Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies
- AERO.K.CC.7 Compare two numbers between 1 and 10 presented as written numerals.

Numbers in Base Ten (NBT)

Work with numbers 11-19 to gain foundations for place value

- AERO.K.NBT.1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (such as $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

Operations Algebraic Thinking (OA)

Understand addition, and understand subtraction.

- AERO.K.OA.1 Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
- AERO.K.OA.2 Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.
- AERO.K.OA.3 Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$)
- AERO.K.OA.4 For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.
- AERO.K.OA.5 Fluently add and subtract within 5.

Measurement and Data MD)

Describe and compare measurable attributes

- AERO.K.MD.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object

Relate addition and subtraction to length

- AERO.K.MD.2 Directly compare two objects with a measurable attribute in common, to see which object has more of/less of the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter.

Classify objects and count the number of objects in each category.

- AERO.K.MD.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

Geometry (G)

Identify and describe shapes

- AERO.K.G.1 Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to
- AERO.K.G.2 Correctly name shapes regardless of their orientations or overall size.
- AERO.K.G.3 Identify shapes as two- dimensional (lying in a plane, flat) or three-dimensional (solid).

Analyze, compare, create, and compose shapes.

- AERO.K.G.4 Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/corners) and other attributes (e.g., having sides of equal length).
- AERO.K.G.5 Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.
- AERO.K.G.6 Compose simple shapes to form larger shapes. For example, Can you join these two triangles with full sides touching to make a rectangle?

Mathematical Practices

1. Make sense of problems and persevere in solving them.

- Use both verbal and nonverbal means, these students begin to explain to themselves and others the meaning of a problem, look for ways to solve it, and determine if their thinking makes sense or if another strategy is needed.

2. Reason abstractly and quantitatively.

- Begin to use numerals to represent specific amount (quantity) Begin to draw pictures, manipulate objects, use diagrams or charts, etc. to express quantitative ideas such as a joining situation Begin to understand how symbols (+, -, =) are used to represent quantitative ideas in a written format.

3. Construct viable arguments and critique the reasoning of others.

- Begin to clearly express, explain, organize and consolidate their math thinking using both verbal and written representations. Begin to learn how to express opinions, become skillful at listening to others, describe their reasoning and respond to others' thinking and reasoning. Begin to develop the ability to reason and analyze situations as they consider questions such as, "Are you sure...?", "Do you think that would happen all the time...?", and "I wonder why...?"

4. Model with mathematics.

- Begin to experiment with representing real-life problem situations in multiple ways such as with numbers, words (mathematical language), drawings, objects, acting out, charts, lists, and number sentences.

5. Use appropriate tools strategically.

- Begin to explore various tools and use them to investigate mathematical concepts. Through multiple opportunities to examine materials Experiment and use both concrete materials (e.g. 3- dimensional solids, connecting cubes, ten frames, number balances) and technological materials (e.g., virtual manipulatives, calculators, interactive websites) to explore mathematical concepts.

6. Attend to precision.

- Begin to express their ideas and reasoning using words. Begin to describe their actions and strategies more clearly, understand and use grade-level appropriate vocabulary accurately, and begin to give precise explanations and reasoning regarding their process of finding solutions.

7. Look for and make use of structure. (Deductive Reasoning)

- Begin to look for patterns and structures in the number system and other areas of mathematics.

8. Look for and express regularity in repeated reasoning. (Inductive Reasoning)

- Begin to notice repetitive actions in geometry, counting, comparing, etc.

AERO: Grade 1

Counting (CC)

Know number names and the count sequence.

- AERO.1.NBT.1 Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.

Compare numbers.

- AERO.1.NBT.3 Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.

Numbers in Base Ten (NBT)

Work with numbers 11-19 to gain foundations for place value

- AERO.1.NBT.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:
 - AERO.1.NBT.2a 10 can be thought of as a bundle of ten ones — called a ten.
 - AERO.1.NBT.2b The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.
 - AERO.1.NBT.2c The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones)

Use place value: understanding and properties of operations to add and subtract.

- AERO.1.NBT.4 Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
- AERO.1.NBT.5 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
- AERO.1.NBT.6 Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Operations Algebraic Thinking (OA)

Understand addition, and understand subtraction.

- AERO.1.OA.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem
- AERO.1.OA.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

Understand and apply properties of operations and the relationship between addition and subtraction Add and subtract within 20.

- AERO.1.OA.3 Apply properties of operations as strategies to add and subtract. Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.)
- AERO.1.OA.4 Understand subtraction as an unknown-addend problem. For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8
- AERO.1.OA.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2)
- AERO.1.OA.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).

Work with addition and subtraction equations.

- AERO.1.OA.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.
- AERO.1.OA.8 Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = _ - 3$, $6 + 6 = _$.

Measurement and Data (MD)

Measure lengths indirectly and by iterating length units

- AERO.1.MD.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object
- AERO.1.MD.2 Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps

Tell and write time.

- AERO.1.MD.3 Tell and write time in hours and half-hours using analog and digital clocks.

Represent and interpret data.

- AERO.1.MD.4 Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

Geometry (G)

Analyze, compare, create, and compose shapes.

- AERO.1.G.1 Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.
- AERO.1.G.2 Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape
- AERO.1.G.3 Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.

Mathematical Practices

1. Make sense of problems and persevere in solving them.

- Explain to themselves the meaning of a problem and look for ways to solve it. May use concrete objects or pictures to help them conceptualize and solve problems. Are willing to try other approaches.

2. Reason abstractly and quantitatively.

- Recognize that a number represents a specific quantity. Connect the quantity to written symbols. Create a representation of a problem while attending to the meanings of the quantities.

3. Construct viable arguments and critique the reasoning of others.

- Construct arguments using concrete referents, such as objects, pictures, drawings, and actions. Explain their own thinking and listen to others' explanations. Decide if the explanations make sense and ask questions.

4. Model with mathematics.

- Experiment with representing problem situations in multiple ways including numbers, words (mathematical language), drawing pictures, using objects, acting out, making a chart or list, creating equations, etc. Connect the different representations and explain the connections.

5. Use appropriate tools strategically.

- Decide when certain tools might be helpful when solving a mathematical problem. For example, first graders decide it might be best to use colored chips to model an addition problem.

6. Attend to precision.

- Use clear and precise language in their discussions with others and when they explain their own reasoning.

7. Look for and make use of structure. (Deductive Reasoning)

- Begin to discern a pattern or structure. For example, if students recognize $12 + 3 = 15$, then they also know $3 + 12 = 15$. (Commutative property of addition.) To add $4 + 6 + 4$, the first two numbers can be added to make a ten, so $4 + 6 + 4 = 10 + 4 = 14$.

8. Look for and express regularity in repeated reasoning. (Inductive Reasoning)

- Notice repetitive actions in counting and computation, etc. Continually check their work by asking themselves, "Does this make sense?"

AERO: Grade 2

Counting (CC)

Know number names and the count sequence.

- AERO.2.NBT.2 Count within 1000; skip-count by 5s, 10s, and 100s.
- AERO.2.NBT.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.

Compare numbers.

- AERO.2.NBT.4 Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.

Numbers in Base Ten (NBT)

Work with numbers 11-19 to gain foundations for place value

- AERO.2.NBT.1 Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:
- AERO.2.NBT.1a 100 can be thought of as a bundle of ten tens — called a hundred.
- AERO.2.NBT.1b The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).

Use place value: understanding and properties of operations to add and subtract.

- AERO.2.NBT.5 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

Operations Algebraic Thinking (OA)

Represent and solve problems involving addition and subtraction.

- AERO.2.NBT.6 Add up to four two-digit numbers using strategies based on place value and properties of operations.
- AERO.2.NBT.7 Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.
- AERO.2.NBT.8 Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900.
- AERO.2.NBT.9 Explain why addition and subtraction strategies work, using place value and the properties of operations.

Understand addition, and understand subtraction.

- AERO.2.OA.1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
- AERO.2.OA.2 Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.

Work with equal groups of objects to gain foundations for multiplication.

- AERO.2.OA.3 Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.
- AERO.2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.

Measurement and Data (MD)

Measure lengths indirectly and by iterating length units

- AERO.2.MD.1 Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
- AERO.2.MD.2 Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.
- AERO.2.MD.3 Estimate lengths using units of inches, feet, centimeters, and meters.
- AERO.2.MD.4 Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.

Relate addition and subtraction to length

- AERO.2.MD.5 Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.
- AERO.2.MD.6 Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.

Tell and write time.

- AERO.2.MD.7 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.
- AERO.2.MD.8 Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?

Represent and interpret data.

- AERO.2.MD.9 Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole number units.

Geometry (G)

Represent and interpret data.

- AERO.2.MD.10 Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems¹ using information presented in a bar graph.

Analyze, compare, create, and compose shapes.

- AERO.2.G.1 Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.1 Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.
- AERO.2.G.2 Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.
- AERO.2.G.3 Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.

Mathematical Practices

1. Make sense of problems and persevere in solving them.

- In second grade, students realize that doing mathematics involves solving problems and discussing how they solved them. Students explain to themselves the meaning of a problem and look for ways to solve it. They may use concrete objects or pictures to help them conceptualize and solve problems. They may check their thinking by asking themselves, “Does this make sense?” They make conjectures about the solution and plan out a problem-solving approach.

2. Reason abstractly and quantitatively.

- Younger students recognize that a number represents a specific quantity. They connect the quantity to written symbols. Quantitative reasoning entails creating a representation of a problem while attending to the meanings of the quantities. Second graders begin to know and use different properties of operations and also relate addition and subtraction to length.

3. Construct viable arguments and critique the reasoning of others.

- Construct arguments using concrete referents, such as objects, pictures, drawings, and actions. Explain their own thinking and listen to others’ explanations. Decide if the explanations make sense and ask appropriate questions.

4. Model with mathematics.

- Experiment with representing problem situations in multiple ways including numbers, words (mathematical language), drawing pictures, using objects, acting out, making a chart or list, creating equations, etc. Connect the different representations and explain the connections. Able to use all representations as needed.

5. Use appropriate tools strategically.

- Consider the available tools (including estimation) when solving a mathematical problem and decide when certain tools might be better suited. For example, second graders may decide to solve a problem by drawing a picture rather than writing an equation.

6. Attend to precision.

- Use clear and precise language in their discussions with others Explain their own reasoning.

7. Look for and make use of structure. (Deductive Reasoning)

- Look for patterns. For example, they adopt mental math strategies based on patterns (making ten, fact families, doubles).

8. Look for and express regularity in repeated reasoning. (Inductive Reasoning)

- Notice repetitive actions in counting and computation, etc. Look for shortcuts, when adding and subtracting, such as rounding up and then adjusting the answer to compensate for the rounding. Continually check their work by asking themselves, “Does this make sense?”

AERO: Grade 3

Number and Operations in Base Ten (NBT)

Use place value understanding and properties of operations to perform multi-digit arithmetic

- AERO.3.NBT.1 Use place value understanding to round whole numbers to the nearest 10 or 100.
- AERO.3.NBT.2 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.
- AERO.3.NBT.3 Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations.
- AERO.3.OA.2 Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe a context in which a number of shares or a number of groups can be expressed as $56 \div 8$.
- AERO.3.OA.3 Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem

Represent and solve problems involving multiplication and division.

- AERO.3.OA.4 Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$, $5 = _ \div 3$, $6 \times 6 = ?$
- AERO.3.OA.6 Understand division as an unknown-factor problem. For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8.

Operations and Algebraic Thinking (OA)

Understand properties of multiplication and the relationship between multiplication and division.

- AERO.3.OA.5 Apply properties of operations as strategies to multiply and divide. Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)
- AERO.3.OA.1 Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5×7

Multiply and divide within 100.

- AERO.3.OA.7 Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.

Solve problems involving the four operations, and identify and explain patterns in arithmetic

- AERO.3.OA.8 Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
- AERO.3.OA.9 Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.

Numbers and Operations- Fractions (NF)

Develop understanding of fractions as numbers.

- AERO.3.NF.1 Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$.
- AERO.3.NF.2 Understand a fraction as a number on the number line; represent fractions on a number line diagram.
- AERO.3.NF.2a Represent a fraction $1/b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$ on the number line.
- AERO.3.NF.2b Represent a fraction a/b on a number line diagram by marking off a lengths $1/b$ from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line
- AERO.3.NF.3 Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.
- AERO.3.NF.3a Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.
- AERO.3.NF.3b Recognize and generate simple equivalent fractions, e.g., $1/2 = 2/4$, $4/6 = 2/3$. Explain why the fractions are equivalent, e.g., by using a visual fraction model.
- AERO.3.NF.3c Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: Express 3 in the form $3 = 3/1$; recognize that $6/1 = 6$; locate $4/4$ and 1 at the same point of a number line diagram.
- AERO.3.NF.3d .3 Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.

Measurement and Data (MD)

Solve problems involving measurement and estimation.

- AERO.3.MD.1 Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram
- AERO.3.MD.2 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). 1 Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.

Represent and interpret data

- AERO.3.MD.3 Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step how many more and how many less problems using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets.
- AERO.3.MD.4 Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units— whole numbers, halves, or quarters.

Geometric measurement: understand concepts of area and relate area to multiplication and to addition.

Geometric measurement: understand concepts of volume.

- AERO.3.MD.5 Recognize area as an attribute of plane figures and understand concepts of area measurement.
- AERO.3.MD.5a A square with side length 1 unit, called a unit square, is said to have one square unit of area, and can be used to measure area.
- AERO.3.MD.5b A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units.
- AERO.3.MD.6 Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units)
- AERO.3.MD.7 Relate area to the operations of multiplication and addition.
- AERO.3.MD.7a Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths.
- AERO.3.MD.7b Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning
- AERO.3.MD.7c Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and $b + c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning.
- AERO.3.MD.7d Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.

Geometric measurement: recognize perimeter.

- AERO.3.MD.8 Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.

Geometry (G)

Reason with shapes and their attributes.

- AERO.3.G.1 Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.
- AERO.3.G.2 Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area, and describe the area of each part as $\frac{1}{4}$ of the area of the shape.

Mathematical Practices

1. Make sense of problems and persevere in solving them.

- Explain to themselves the meaning of a problem and look for ways to solve it. May use concrete objects or pictures to help them conceptualize and solve problems. May check their thinking by asking themselves, “Does this make sense?” Listen to the strategies of others and will try different approaches. Will use another method to check their answers.

2. Reason abstractly and quantitatively.

- Recognize that a number represents a specific quantity. Connect the quantity to written symbols and create a logical representation of the problem at hand, considering both the appropriate units involved and the meaning of quantities.

3. Construct viable arguments and critique the reasoning of others.

- May construct arguments using concrete referents, such as objects, pictures, and drawings. Refine their mathematical communication skills as they participate in mathematical discussions involving questions like “How did you get that?” and “Why is that true?” Explain their thinking to others and respond to others’ thinking.

4. Model with mathematics.

- Experiment with representing problem situations in multiple ways including numbers, words (mathematical language), drawing pictures, using objects, acting out, making a chart, list, or graph, creating equations, etc.
- Connect the different representations and explain the connections. Evaluate their results in the context of the situation and reflect on whether the results make sense.

5. Use appropriate tools strategically.

- Consider the available tools (including estimation) when solving a mathematical problem and decide when certain tools might be helpful. For EXAMPLE, they may use graph paper to find all the possible rectangles that have a given perimeter. Compile the possibilities into an organized list or a table, and determine whether they have all the possible rectangles.

6. Attend to precision.

- Use clear and precise language in their discussions with others and in their own reasoning. Are careful about specifying units of measure and state the meaning of the symbols they choose. For example, when figuring out the area of a rectangle they record their answers in square units.

7. Look for and make use of structure. (Deductive Reasoning)

- Look closely to discover a pattern or structure. For example, students use properties of operations as strategies to multiply and divide (commutative and distributive properties).

8. Look for and express regularity in repeated reasoning. (Inductive Reasoning)

- Notice repetitive actions in computation and look for more shortcut methods. For example, students may use the distributive property as a strategy for using products they know to solve products that they don't know. For example, if students are asked to find the product of 7×8 , they might decompose 7 into 5 and 2 and then multiply 5×8 and 2×8 to arrive at $40 + 16 = 56$. Continually evaluate their work by asking themselves, "Does this make sense?"

AERO: Grade 4

Number and Operations in Base Ten (NBT)

Use place value understanding and properties of operations to perform multi-digit arithmetic

- AERO.4.NBT.1 Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. For example, recognize that $700 \div 70 = 10$ by applying concepts of place value and division.
- AERO.4.NBT.2 Read and write multi digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.
- AERO.4.NBT.3 Use place value understanding to round multi-digit whole numbers to any place
- AERO.4.NBT.4 Fluently add and subtract multi-digit whole numbers using the standard algorithm.
- AERO.4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
- AERO.4.NBT.6 Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
- AERO.4.NF.5 Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. For example, express $3/10$ as $30/100$, and add $3/10 + 4/100 = 34/100$.
- AERO.4.NF.6 Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as $62/100$; describe a length as 0.62 meters; locate 0.62 on a number line diagram.

Generalize place value understanding for multi-digit whole numbers and decimals to hundredths

- AERO.4.NF.7 Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual model.

Operations and Algebraic Thinking (OA)

Understand properties of multiplication and the relationship between multiplication and division.

- AERO.4.OA.1 Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.

Solve problems involving the four operations, and identify and explain patterns in arithmetic

- AERO.4.OA.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
- AERO.4.OA.2 Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.

Gain familiarity with factors and multiples.

- AERO.4.OA.4 Find all factor pairs for a whole number in the range 1-100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1- 100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1-100 is prime or composite.

Generate and analyze patterns.

- AERO.4.OA.5 Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. For example, given the rule Add 3 and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.

Numbers and Operations- Fractions (NF)

Develop understanding of fractions as numbers.

- AERO.4.NF.1 Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.
- AERO.4.NF.2 Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $1/2$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.

Build fractions from unit fractions.

- AERO.4.NF.3 Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$.

Use equivalent fractions as a strategy to add and subtract fractions.

- AERO.4.NF.3a Understand addition and subtraction of fractions as joining and separating parts referring to the same whole
- AERO.4.NF.3b Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. Examples: $\frac{3}{8} = \frac{1}{8} + \frac{1}{8} + \frac{1}{8}$; $\frac{3}{8} = \frac{1}{8} + \frac{2}{8}$; $2 \frac{1}{8} = 1 + 1 + \frac{1}{8} = \frac{8}{8} + \frac{8}{8} + \frac{1}{8}$.
- AERO.4.NF.3c Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.
- AERO.4.NF.3d Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.

Apply and extend previous understandings of multiplication and division.

- AERO.4.NF.4 Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.
- AERO.4.NF.4a Understand a fraction $\frac{a}{b}$ as a multiple of $\frac{1}{b}$. For example, use a visual fraction model to represent $\frac{5}{4}$ as the product $5 \times (\frac{1}{4})$, recording the conclusion by the equation $\frac{5}{4} = 5 \times (\frac{1}{4})$.
- AERO.4.NF.4b Understand a multiple of $\frac{a}{b}$ as a multiple of $\frac{1}{b}$, and use this understanding to multiply a fraction by a whole number. For example, use a visual fraction model to express $3 \times (\frac{2}{5})$ as $6 \times (\frac{1}{5})$, recognizing this product as $\frac{6}{5}$. (In general, $n \times (\frac{a}{b}) = (\frac{n \times a}{b})$.)
- AERO.4.NF.4c Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. For example, if each person at a party will eat $\frac{3}{8}$ of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?

Measurement and Data (MD)

Solve problems involving measurement and conversion of measurements.

- AERO.4.MD.1 Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...
- AERO.4.MD.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.
- AERO.4.MD.3 Apply the area and perimeter formulas for rectangles in real world and mathematical problems. For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.

Represent and interpret data.

- AERO.4.MD.4 Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Solve problems involving addition and subtraction of fractions by using information presented in line plots. For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.

Geometric measurement: understand concepts of angle and measure angles.

- AERO.4.MD.5 Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement.
- AERO.4.MD.5a An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through $\frac{1}{360}$ of a circle is called a one-degree angle, and can be used to measure angles.
- AERO.4.MD.5b An angle that turns through n one-degree angles is said to have an angle measure of n degrees.
- AERO.4.MD.6 Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.
- AERO.4.MD.7 Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.

Geometry (G)

Reason with shapes and their attributes.

- AERO.4.G.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.
- AERO.4.G.2 Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.

Graph points on the coordinate plane to solve real-world and mathematical problems.

- AERO.4.G.3 Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.

Mathematical Practices

1. Make sense of problems and persevere in solving them.

- Know that doing mathematics involves solving problems and discussing how they solved them. Explain to themselves the meaning of a problem and look for ways to solve it. May use concrete objects or pictures to help them conceptualize and solve problems. May check their thinking by asking themselves, "Does this make sense?" Listen to the strategies of others and will try different approaches. Will use another method to check their answers.

2. Reason abstractly and quantitatively.

-
- Recognize that a number represents a specific quantity. Connect the quantity to written symbols and create a logical representation of the problem at hand, considering both the appropriate units involved and the meaning of quantities. Extend this understanding from whole numbers to their work with fractions and decimals. Write simple expressions, record calculations with numbers, and represent or round numbers using place value concepts.

3. Construct viable arguments and critique the reasoning of others.

- May construct arguments using concrete referents, such as objects, pictures, and drawings. Explain their thinking and make connections between models and equations. Refine their mathematical communication skills as they participate in mathematical discussions involving questions like “How did you get that?” and “Why is that true?” Explain their thinking to others and respond to others’ thinking.

4. Model with mathematics.

- Experiment with representing problem situations in multiple ways including numbers, words (mathematical language), drawing pictures, using objects, making a chart, list, or graph, creating equations, etc. Connect the different representations and explain the connections. Use all of these representations as needed. Evaluate their results in the context of the situation and reflect on whether the results make sense.

5. Use appropriate tools strategically.

- Consider the available tools (including estimation) when solving a mathematical problem and decide when certain tools might be helpful. For instance, they may use graph paper or a number line to represent and compare decimals and protractors to measure angles. Use other measurement tools to understand the relative size of units within a system and express measurements given in larger units in terms of smaller units.

6. Attend to precision.

- Develop their mathematical communication skills, they try to use clear and precise language in their discussions with others and in their own reasoning. Are careful about specifying units of measure and state the meaning of the symbols they choose. For instance, they use appropriate labels when creating a line plot.

7. Look for and make use of structure. (Deductive Reasoning)

- Look closely to discover a pattern or structure. For instance, students use properties of operations to explain calculations (partial products model). Relate representations of counting problems such as tree diagrams and arrays to the multiplication principal of counting. Generate number or shape patterns that follow a given rule.

8. Look for and express regularity in repeated reasoning. (Inductive Reasoning)

- Notice repetitive actions in computation to make generalizations Use models to explain calculations and understand how algorithms work. Use models to examine patterns and generate their own algorithms. For example, students use visual fraction models to write equivalent fractions.

AERO: Grade 5

Number and Operations in Base Ten (NBT)

Use place value understanding and properties of operations to perform multi-digit arithmetic

- AERO.5.NBT.4 Use place value understanding to round decimals to any place.
- AERO.5.NBT.5 Fluently multiply multi-digit whole numbers using the standard algorithm.
- AERO.5.NBT.2 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.
- AERO.5.NBT.6 Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
- AERO.5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.
- AERO.5.NBT.1 Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and $1/10$ of what it represents in the place to its left.
- AERO.5.NBT.3 Read, write, and compare decimals to thousandths.
- AERO.5.NBT.3a Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.

Generalize place value understanding for multi-digit whole numbers and decimals to hundredths

- AERO.5.NBT.3b Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons

Represent and solve problems involving multiplication and division.

- AERO.5.OA.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation add 8 and 7, then multiply by 2 as $2 \times (8 + 7)$. Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$, without having to calculate the indicated sum or product.

Operations and Algebraic Thinking (OA)

Understand properties of multiplication and the relationship between multiplication and division.

- AERO.5.OA.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols

Generate and analyze patterns.

- AERO.5.OA.3 Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. For example, given the rule Add 3 and the starting number 0, and given the rule Add 6 and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.

Numbers and Operations- Fractions (NF)

Use equivalent fractions as a strategy to add and subtract fractions.

- AERO.5.NF.1 Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example, $\frac{2}{3} + \frac{5}{4} = \frac{8}{12} + \frac{15}{12} = \frac{23}{12}$. (In general, $\frac{a}{b} + \frac{c}{d} = \frac{ad + bc}{bd}$.)
- AERO.5.NF.2 Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result $\frac{2}{5} + \frac{1}{2} = \frac{3}{7}$, by observing that $\frac{3}{7} < \frac{1}{2}$.

Apply and extend previous understandings of multiplication and division.

- AERO.5.NF.4 Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.
- AERO.5.NF.7b Interpret division of a whole number by a unit fraction, and compute such quotients. For example, create a story context for $4 \div (1/5)$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $4 \div (1/5) = 20$ because $20 \times (1/5) = 4$.
- AERO.5.NF.4a Interpret the product $(a/b) \times q$ as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$. For example, use a visual fraction model to show $(2/3) \times 4 = 8/3$, and create a story context for this equation. Do the same with $(2/3) \times (4/5) = 8/15$. (In general, $(a/b) \times (c/d) = ac/bd$.)
- AERO.5.NF.7c Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. For example, how much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $1/3$ -cup servings are in 2 cups of raisins?
- AERO.5.NF.3 Interpret a fraction as division of the numerator by the denominator ($a/b = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. For example, interpret $3/4$ as the result of dividing 3 by 4, noting that $3/4$ multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size $3/4$. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?
- AERO.5.F.4b Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.
- AERO.5.F.5a Interpret multiplication as scaling (resizing), by Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.
- AERO.5.NF.5b Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $a/b = (n \times a)/(n \times b)$ to the effect of multiplying a/b by 1.
- AERO.5.NF.6 Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.
- AERO.5.NF.7 Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions
- AERO.5.NF.7a Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. For example, create a story context for $(1/3) \div 4$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $(1/3) \div 4 = 1/12$ because $(1/12) \times 4 = 1/3$.

Measurement and Data (MD)

Solve problems involving measurement and conversion of measurements.

- AERO.5.MD.1 Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.

Represent and interpret data.

- AERO.5.NF.2 Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Use operations on fractions for this grade to solve problems involving information presented in line plots. For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.

Geometric measurement: understand concepts of area and relate area to multiplication and to addition.

Geometric measurement: understand concepts of volume.

- AERO.5.MD.3 Recognize volume as an attribute of solid figures and understand concepts of volume measurement.
- AERO.5.MD.3a A cube with side length 1 unit, called a unit cube, is said to have one cubic unit of volume, and can be used to measure volume.
- AERO.5.MD.3b A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units.
- AERO.5.MD.4 Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.
- AERO.5.MD.5 Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume
- AERO.5.MD.5a Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication.
- AERO.5.MD.5b Apply the formulas $V = l \times w \times h$ and $V = b \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems.
- AERO.5.MD.5c Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.

Geometry (G)

Reason with shapes and their attributes.

- AERO.5.G.3 Classify two-dimensional figures into categories based on their properties.

Graph points on the coordinate plane to solve real-world and mathematical problems.

- AERO.5.G.1 Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate).
- AERO.5.G.2 Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.
- AERO.5.G.4 Classify two-dimensional figures in a hierarchy based on properties

Mathematical Practices

1. Make sense of problems and persevere in solving them.

- Solve problems by applying their understanding of operations with whole numbers, decimals, and fractions including mixed numbers. Solve problems related to volume and measurement conversions. Seek the meaning of a problem and look for efficient ways to represent and solve it. Check their thinking by asking themselves, “What is the most efficient way to solve the problem?”, “Does this make sense?”, and “Can I solve the problem in a different way?”.

2. Reason abstractly and quantitatively.

- Recognize that a number represents a specific quantity. Connect quantities to written symbols and create a logical representation of the problem at hand, considering both the appropriate units involved and the meaning of quantities. Extend this understanding from whole numbers to their work with fractions and decimals. Write simple expressions that record calculations with numbers and represent or round numbers using place value concepts.

3. Construct viable arguments and critique the reasoning of others.

- Construct arguments using concrete referents, such as objects, pictures, and drawings. Explain calculations based upon models and properties of operations and rules that generate patterns. Demonstrate and explain the relationship between volume and multiplication. Refine their mathematical communication skills as they participate in mathematical discussions involving questions like “How did you get that?” and “Why is that true?” Explain their thinking to others and respond to others’ thinking.

4. Model with mathematics.

- Experiment with representing problem situations in multiple ways including numbers, words (mathematical language), drawing pictures, using objects, making a chart, list, or graph, creating equations, etc. Connect the different representations and explain the connections. Use all of these representations as needed. Evaluate their results in the context of the situation and whether the results make sense. Evaluate the utility of models to determine which models are most useful and efficient to solve problems.

5. Use appropriate tools strategically.

- Consider the available tools (including estimation) when solving a mathematical problem and decide when certain tools might be helpful. For instance, they may use unit cubes to fill a rectangular prism and then use a ruler to measure the dimensions. Use graph paper to accurately create graphs and solve problems or make predictions from real world data.

6. Attend to precision.

- Continue to refine their mathematical communication skills by using clear and precise language in their discussions with others and in their own reasoning. Use appropriate terminology when referring to expressions, fractions, geometric figures, and coordinate grids. Are careful about specifying units of measure and state the meaning of the symbols they choose. For instance, when figuring out the volume of a rectangular prism they record their answers in cubic units.

7. Look for and make use of structure. (Deductive Reasoning)

- Look closely to discover a pattern or structure. For instance, students use properties of operations as strategies to add, subtract, multiply and divide with whole numbers, fractions, and decimals. Examine numerical patterns and relate them to a rule or a graphical representation.

8. Look for and express regularity in repeated reasoning. (Inductive Reasoning)

- Use repeated reasoning to understand algorithms and make generalizations about patterns. Connect place value and their prior work with operations to understand algorithms to fluently multiply multi-digit numbers and perform all operations with decimals to hundredths. Explore operations with fractions with visual models and begin to formulate generalizations.

Ratios & Proportional Relationships

CCSS: Grade 6

6.RP.A. Understand ratio concepts and use ratio reasoning to solve problems.

- 6.RP.A.1. Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.
- 6.RP.A.2. Understand the concept of a unit rate a/b associated with a ratio $a:b$ with $b \neq 0$, and use rate language in the context of a ratio relationship.
- 6.RP.A.3. Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.
- 6.RP.A.3a. Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.
- 6.RP.A.3b. Solve unit rate problems including those involving unit pricing and constant speed.
- 6.RP.A.3c. Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means $30/100$ times the quantity); solve problems involving finding the whole, given a part and the percent.
- 6.RP.A.3d. Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.

CCSS: Grade 7

7.RP.A. Analyze proportional relationships and use them to solve real-world and mathematical problems.

- 7.RP.A.1. Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units.
- 7.RP.A.2. Recognize and represent proportional relationships between quantities.
- 7.RP.A.2a. Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin.
- 7.RP.A.2b. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.
- 7.RP.A.2c. Represent proportional relationships by equations.
- 7.RP.A.2d. Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points $(0, 0)$ and $(1, r)$ where r is the unit rate.
- 7.RP.A.3. Use proportional relationships to solve multistep ratio and percent problems.

The Number System

CCSS: Grade 6

6.NS.A. Apply and extend previous understandings of multiplication and division to divide fractions by fractions.

- 6.NS.A.1. Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem.[Show details](#)

6.NS.B. Compute fluently with multi-digit numbers and find common factors and multiples.

- 6.NS.B.2. Fluently divide multi-digit numbers using the standard algorithm.
- 6.NS.B.3. Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.
- 6.NS.B.4. Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor.[Show details](#)

6.NS.C. Apply and extend previous understandings of numbers to the system of rational numbers.

- 6.NS.C.5. Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.
- 6.NS.C.6. Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.
- 6.NS.C.6a. Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., $-(-3) = 3$, and that 0 is its own opposite.
- 6.NS.C.6b. Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.
- 6.NS.C.6c. Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.
- 6.NS.C.7. Understand ordering and absolute value of rational numbers.
- 6.NS.C.7a. Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram.
- 6.NS.C.7b. Write, interpret, and explain statements of order for rational numbers in real-world contexts.
- 6.NS.C.7c. Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation.
- 6.NS.C.7d. Distinguish comparisons of absolute value from statements about order.
- 6.NS.C.8. Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.

CCSS: Grade 7

7.NS.A. Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

- 7.NS.A.1. Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.
- 7.NS.A.1a. Describe situations in which opposite quantities combine to make 0.
- 7.NS.A.1b. Understand $p + q$ as the number located a distance $|q|$ from p , in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts.
- 7.NS.A.1c. Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts.
- 7.NS.A.1d. Apply properties of operations as strategies to add and subtract rational numbers.
- 7.NS.A.2. Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.
- 7.NS.A.2a. Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts.
- 7.NS.A.2b. Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If p and q are integers, then $-(p/q) = (-p)/q = p/(-q)$. Interpret quotients of rational numbers by describing real-world contexts.
- 7.NS.A.2c. Apply properties of operations as strategies to multiply and divide rational numbers.
- 7.NS.A.2d. Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats.
- 7.NS.A.3. Solve real-world and mathematical problems involving the four operations with rational numbers.

CCSS: Grade 8

8.NS.A. Know that there are numbers that are not rational, and approximate them by rational numbers.

- 8.NS.A.1. Understand informally that every number has a decimal expansion; the rational numbers are those with decimal expansions that terminate in 0s or eventually repeat. Know that other numbers are called irrational.
- 8.NS.A.2. Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions

Expressions & Equations

CCSS: Grade 6

6.EE.A. Apply and extend previous understandings of arithmetic to algebraic expressions.

- 6.EE.A.1. Write and evaluate numerical expressions involving whole-number exponents.
- 6.EE.A.2. Write, read, and evaluate expressions in which letters stand for numbers.
- 6.EE.A.2a. Write expressions that record operations with numbers and with letters standing for numbers.
- 6.EE.A.2b. Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity.
- 6.EE.A.2c. Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations).
- 6.EE.A.3. Apply the properties of operations to generate equivalent expressions.
- 6.EE.A.4. Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them).

6.EE.B. Reason about and solve one-variable equations and inequalities.

- 6.EE.B.5. Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.
- 6.EE.B.6. Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.
- 6.EE.B.7. Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which p , q and x are all nonnegative rational numbers.
- 6.EE.B.8. Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams.

6.EE.C. Represent and analyze quantitative relationships between dependent and independent variables.

- 6.EE.C.9. Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation $d = 65t$ to represent the relationship between distance and time.

CCSS: Grade 7

7.EE.A. Use properties of operations to generate equivalent expressions.

- 7.EE.A.1. Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.
- 7.EE.A.2. Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related.

7.EE.B. Solve real-life and mathematical problems using numerical and algebraic expressions and equations.

- 7.EE.B.3. Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies.
- 7.EE.B.4. Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.
- 7.EE.B.4a. Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p , q , and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach.
- 7.EE.B.4b. Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p , q , and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem.

CCSS: Grade 8

8.EE.A. Work with radicals and integer exponents.

- 8.EE.A.1. Know and apply the properties of integer exponents to generate equivalent numerical expressions.
- 8.EE.A.2. Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that $\sqrt{2}$ is irrational.
- 8.EE.A.3. Use numbers expressed in the form of a single digit times a whole-number power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other.
- 8.EE.A.4. Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g., use millimeters per year for seafloor spreading). Interpret scientific notation that has been generated by technology.

8.EE.B. Understand the connections between proportional relationships, lines, and linear equations.

- 8.EE.B.5. Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.
- 8.EE.B.6. Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b .

8.EE.C. Analyze and solve linear equations and pairs of simultaneous linear equations.

- 8.EE.C.7. Solve linear equations in one variable.
- 8.EE.C.7a. Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form $x = a$, $a = a$, or $a = b$ results (where a and b are different numbers).
- 8.EE.C.7b. Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.
- 8.EE.C.8. Analyze and solve pairs of simultaneous linear equations.
- 8.EE.C.8a. Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously.
- 8.EE.C.8b. Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection. For example, $3x + 2y = 5$ and $3x + 2y = 6$ have no solution because $3x + 2y$ cannot simultaneously be 5 and 6.
- 8.EE.C.8c. Solve real-world and mathematical problems leading to two linear equations in two variables. For example, given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair.

Functions

8.F.A. Define, evaluate, and compare functions.

- 8.F.A.1. Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output.
- 8.F.A.2. Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.
- 8.F.A.3. Interpret the equation $y = mx + b$ as defining a linear function, whose graph is a straight line; give examples of functions that are not linear. [Show details](#)

8.F.B. Use functions to model relationships between quantities.

- 8.F.B.4. Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.
- 8.F.B.5. Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally.

Geometry

CCSS: Grade 6

6.G.A. Solve real-world and mathematical problems involving area, surface area, and volume.

- 6.G.A.1. Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.
- 6.G.A.2. Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas $V = l w h$ and $V = b h$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.
- 6.G.A.3. Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.
- 6.G.A.4. Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.

CCSS: Grade 7

7.G.A. Draw, construct, and describe geometrical figures and describe the relationships between them.

- 7.G.A.1. Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.
- 7.G.A.2. Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.
- 7.G.A.3. Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.

7.G.B. Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.

- 7.G.B.4. Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.
- 7.G.B.5. Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.
- 7.G.B.6. Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.

CCSS: Grade 8

8.G.A. Understand congruence and similarity using physical models, transparencies, or geometry software.

- 8.G.A.1. Verify experimentally the properties of rotations, reflections, and translations:
 - 8.G.A.1a. Lines are taken to lines, and line segments to line segments of the same length.
 - 8.G.A.1b. Angles are taken to angles of the same measure.
 - 8.G.A.1c. Parallel lines are taken to parallel lines.
- 8.G.A.2. Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.
- 8.G.A.3. Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.
- 8.G.A.4. Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them.
- 8.G.A.5. Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles.[Show details](#)

8.G.B. Understand and apply the Pythagorean Theorem.

- 8.G.B.6. Explain a proof of the Pythagorean Theorem and its converse.
- 8.G.B.7. Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.
- 8.G.B.8. Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.

8.G.C. Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.

- 8.G.C.9. Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.

Statistics & Probability

CCSS: Grade 6

6.SP.A. Develop understanding of statistical variability.	
	<ul style="list-style-type: none"> • 6.SP.A.1. Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers.<i>Show details</i> • 6.SP.A.2. Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape. • 6.SP.A.3. Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.
6.SP.B. Summarize and describe distributions.	
	<ul style="list-style-type: none"> • 6.SP.B.4. Display numerical data in plots on a number line, including dot plots, histograms, and box plots. • 6.SP.B.5. Summarize numerical data sets in relation to their context, such as by: <ul style="list-style-type: none"> • 6.SP.B.5a. Reporting the number of observations. • 6.SP.B.5b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement. • 6.SP.B.5c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered. • 6.SP.B.5d. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.
CCSS: Grade 7	
7.SP.A. Use random sampling to draw inferences about a population.	
	<ul style="list-style-type: none"> • 7.SP.A.1. Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences. • 7.SP.A.2. Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions.<i>Show details</i>
7.SP.B. Draw informal comparative inferences about two populations.	
	<ul style="list-style-type: none"> • 7.SP.B.3. Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability.<i>Show details</i> • 7.SP.B.4. Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations.<i>Show details</i>
7.SP.C. Investigate chance processes and develop, use, and evaluate probability models.	

- 7.SP.C.5. Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.
- 7.SP.C.6. Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability.[Show details](#)
- 7.SP.C.7. Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy.
- 7.SP.C.7a. Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events.[Show details](#)
- 7.SP.C.7b. Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process.[Show details](#)
- 7.SP.C.8. Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.
- 7.SP.C.8a. Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs.
- 7.SP.C.8b. Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g., “rolling double sixes”), identify the outcomes in the sample space which compose the event.
- 7.SP.C.8c. Design and use a simulation to generate frequencies for compound events.[Show details](#)

CCSS: Grade 8

8.SP.A. Investigate patterns of association in bivariate data.

- 8.SP.A.1. Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.
- 8.SP.A.2. Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.
- 8.SP.A.3. Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept.[Show details](#)
- 8.SP.A.4. Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables.[Show details](#)

The Real Number System

CCSS: HS: Num/Quantity

HSN-RN.A. Extend the properties of exponents to rational exponents.

- HSN-RN.A.1. Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents. Show details
- HSN-RN.A.2. Rewrite expressions involving radicals and rational exponents using the properties of exponents.

HSN-RN.B. Use properties of rational and irrational numbers.

- HSN-RN.B.3. Explain why the sum or product of two rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational.

Quantities

HSN-Q.A. Reason quantitatively and use units to solve problems.

- HSN-Q.A.1. Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.
- HSN-Q.A.2. Define appropriate quantities for the purpose of descriptive modeling.
- HSN-Q.A.3. Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.

The Complex Number System

HSN-CN.A. Perform arithmetic operations with complex numbers.

- HSN-CN.A.1. Know there is a complex number i such that $i^2 = -1$, and every complex number has the form $a + bi$ with a and b real.
- HSN-CN.A.2. Use the relation $i^2 = -1$ and the commutative, associative, and distributive properties to add, subtract, and multiply complex numbers.
- HSN-CN.A.3. (+) Find the conjugate of a complex number; use conjugates to find moduli and quotients of complex numbers.

HSN-CN.B. Represent complex numbers and their operations on the complex plane.

- HSN-CN.B.4. (+) Represent complex numbers on the complex plane in rectangular and polar form (including real and imaginary numbers), and explain why the rectangular and polar forms of a given complex number represent the same number.
- HSN-CN.B.5. (+) Represent addition, subtraction, multiplication, and conjugation of complex numbers geometrically on the complex plane; use properties of this representation for computation. For example, $(1 - \sqrt{3}i)^3 = 8$ because $(1 - \sqrt{3}i)$ has modulus 2 and argument 120° .
- HSN-CN.B.6. (+) Calculate the distance between numbers in the complex plane as the modulus of the difference, and the midpoint of a segment as the average of the numbers at its endpoints.

HSN-CN.C. Use complex numbers in polynomial identities and equations.

- HSN-CN.C.7. Solve quadratic equations with real coefficients that have complex solutions.
- HSN-CN.C.8. (+) Extend polynomial identities to the complex numbers. For example, rewrite $x^2 + 4$ as $(x + 2i)(x - 2i)$.
- HSN-CN.C.9. (+) Know the Fundamental Theorem of Algebra; show that it is true for quadratic polynomials.

Vector & Matrix Quantities

HSN-VM.A. Represent and model with vector quantities.

- HSN-VM.A.1. (+) Recognize vector quantities as having both magnitude and direction. Represent vector quantities by directed line segments, and use appropriate symbols for vectors and their magnitudes (e.g., v , $|v|$, $\|v\|$, v).
- HSN-VM.A.2. (+) Find the components of a vector by subtracting the coordinates of an initial point from the coordinates of a terminal point.
- HSN-VM.A.3. (+) Solve problems involving velocity and other quantities that can be represented by vectors.

HSN-VM.B. Perform operations on vectors.

- HSN-VM.B.4. (+) Add and subtract vectors.
- HSN-VM.B.4a. Add vectors end-to-end, component-wise, and by the parallelogram rule. Understand that the magnitude of a sum of two vectors is typically not the sum of the magnitudes.
- HSN-VM.B.4b. Given two vectors in magnitude and direction form, determine the magnitude and direction of their sum.
- HSN-VM.B.4c. Understand vector subtraction $v - w$ as $v + (-w)$, where $-w$ is the additive inverse of w , with the same magnitude as w and pointing in the opposite direction. Represent vector subtraction graphically by connecting the tips in the appropriate order, and perform vector subtraction component-wise.
- HSN-VM.B.5. (+) Multiply a vector by a scalar.
- HSN-VM.B.5a. Represent scalar multiplication graphically by scaling vectors and possibly reversing their direction; perform scalar multiplication component-wise, e.g., as $c(v_x, v_y) = (cv_x, cv_y)$.
- HSN-VM.B.5b. Compute the magnitude of a scalar multiple cv using $\|cv\| = |c|v\|$. Compute the direction of cv knowing that when $|c| > 0$, the direction of cv is either along v (for $c > 0$) or against v (for $c < 0$).

HSN-VM.C. Perform operations on matrices and use matrices in applications.

- HSN-VM.C.6. (+) Use matrices to represent and manipulate data, e.g., to represent payoffs or incidence relationships in a network.
- HSN-VM.C.7. (+) Multiply matrices by scalars to produce new matrices, e.g., as when all of the payoffs in a game are doubled.
- HSN-VM.C.8. (+) Add, subtract, and multiply matrices of appropriate dimensions.
- HSN-VM.C.9. (+) Understand that, unlike multiplication of numbers, matrix multiplication for square matrices is not a commutative operation, but still satisfies the associative and distributive properties.
- HSN-VM.C.10. (+) Understand that the zero and identity matrices play a role in matrix addition and multiplication similar to the role of 0 and 1 in the real numbers. The determinant of a square matrix is nonzero if and only if the matrix has a multiplicative inverse.
- HSN-VM.C.11. (+) Multiply a vector (regarded as a matrix with one column) by a matrix of suitable dimensions to produce another vector. Work with matrices as transformations of vectors.
- HSN-VM.C.12. (+) Work with 2×2 matrices as a transformations of the plane, and interpret the absolute value of the determinant in terms of area.

Seeing Structure in Expressions

CCSS: HS: Algebra

HSA-SSE.A. Interpret the structure of expressions.

- HSA-SSE.A.1. Interpret expressions that represent a quantity in terms of its context.
- HSA-SSE.A.1a. Interpret parts of an expression, such as terms, factors, and coefficients.
- HSA-SSE.A.1b. Interpret complicated expressions by viewing one or more of their parts as a single entity.[Show details](#)
- HSA-SSE.A.2. Use the structure of an expression to identify ways to rewrite it.[Show details](#)

HSA-SSE.B. Write expressions in equivalent forms to solve problems.

- HSA-SSE.B.3. Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.
- HSA-SSE.B.3a. Factor a quadratic expression to reveal the zeros of the function it defines.
- HSA-SSE.B.3b. Complete the square in a quadratic expression to reveal the maximum or minimum value of the function it defines.
- HSA-SSE.B.3c. Use the properties of exponents to transform expressions for exponential functions.[Show details](#)
- HSA-SSE.B.4. Derive the formula for the sum of a finite geometric series (when the common ratio is not 1), and use the formula to solve problems.[Show details](#)

Arithmetic with Polynomials & Rational Functions

HSA-APR.A. Perform arithmetic operations on polynomials.

	<ul style="list-style-type: none"> • HSA-APR.A.1. Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.
HSA-APR.B. Understand the relationship between zeros and factors of polynomials.	
	<ul style="list-style-type: none"> • HSA-APR.B.2. Know and apply the Remainder Theorem: For a polynomial $p(x)$ and a number a, the remainder on division by $x - a$ is $p(a)$, so $p(a) = 0$ if and only if $(x - a)$ is a factor of $p(x)$. • HSA-APR.B.3. Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function defined by the polynomial.
HSA-APR.C. Use polynomial identities to solve problems.	
	<ul style="list-style-type: none"> • HSA-APR.C.4. Prove polynomial identities and use them to describe numerical relationships. Show details • HSA-APR.C.5. (+) Know and apply the Binomial Theorem for the expansion of $(x + y)^n$ in powers of x and y for a positive integer n, where x and y are any numbers, with coefficients determined for example by Pascal's Triangle.
HSA-APR.D. Rewrite rational expressions.	
	<ul style="list-style-type: none"> • HSA-APR.D.6. Rewrite simple rational expressions in different forms; write $a(x)/b(x)$ in the form $q(x) + r(x)/b(x)$, where $a(x)$, $b(x)$, $q(x)$, and $r(x)$ are polynomials with the degree of $r(x)$ less than the degree of $b(x)$, using inspection, long division, or, for the more complicated examples, a computer algebra system. • HSA-APR.D.7. (+) Understand that rational expressions form a system analogous to the rational numbers, closed under addition, subtraction, multiplication, and division by a nonzero rational expression; add, subtract, multiply, and divide rational expressions.
Creating Equations	
HSA-CED.A. Create equations that describe numbers or relationships.	
	<ul style="list-style-type: none"> • HSA-CED.A.1. Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear and quadratic functions, and simple rational and exponential functions. • HSA-CED.A.2. Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. • HSA-CED.A.3. Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context. Show details • HSA-CED.A.4. Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. Show details
Reasoning with Equations & Inequalities	
HSA-REI.A. Understand solving equations as a process of reasoning and explain the reasoning.	
	<ul style="list-style-type: none"> • HSA-REI.A.1. Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method. • HSA-REI.A.2. Solve simple rational and radical equations in one variable, and give examples showing how extraneous solutions may arise.

HSA-REI.B. Solve equations and inequalities in one variable.	
	<ul style="list-style-type: none"> • HSA-REI.B.3. Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters. • HSA-REI.B.4. Solve quadratic equations in one variable. • HSA-REI.B.4a. Use the method of completing the square to transform any quadratic equation in x into an equation of the form $(x - p)^2 = q$ that has the same solutions. Derive the quadratic formula from this form. • HSA-REI.B.4b. Solve quadratic equations by inspection (e.g., for $x^2 = 49$), taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as $a \pm bi$ for real numbers a and b.
HSA-REI.C. Solve systems of equations.	
	<ul style="list-style-type: none"> • HSA-REI.C.5. Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions. • HSA-REI.C.6. Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables. • HSA-REI.C.7. Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically. For example, find the points of intersection between the line $y = -3x$ and the circle $x^2 + y^2 = 3$. • HSA-REI.C.8. (+) Represent a system of linear equations as a single matrix equation in a vector variable. • HSA-REI.C.9. (+) Find the inverse of a matrix if it exists and use it to solve systems of linear equations (using technology for matrices of dimension 3×3 or greater).
HSA-REI.D. Represent and solve equations and inequalities graphically.	
	<ul style="list-style-type: none"> • HSA-REI.D.10. Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line). • HSA-REI.D.11. Explain why the x-coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where $f(x)$ and/or $g(x)$ are linear, polynomial, rational, absolute value, exponential, and logarithmic functions. • HSA-REI.D.12. Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes.
Interpreting Functions	
CCSS: HS: Functions	
HSF-IF.A. Understand the concept of a function and use function notation.	

- HSF-IF.A.1. Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If f is a function and x is an element of its domain, then $f(x)$ denotes the output of f corresponding to the input x . The graph of f is the graph of the equation $y = f(x)$.
- HSF-IF.A.2. Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.
- HSF-IF.A.3. Recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers.[Show details](#)

HSF-IF.B. Interpret functions that arise in applications in terms of the context.

- HSF-IF.B.4. For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship.[Show details](#)
- HSF-IF.B.5. Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes.[Show details](#)
- HSF-IF.B.6. Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.

HSF-IF.C. Analyze functions using different representations.

- HSF-IF.C.7. Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.
- HSF-IF.C.7a. Graph linear and quadratic functions and show intercepts, maxima, and minima.
- HSF-IF.C.7b. Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions.
- HSF-IF.C.7c. Graph polynomial functions, identifying zeros when suitable factorizations are available, and showing end behavior.
- HSF-IF.C.7d. (+) Graph rational functions, identifying zeros and asymptotes when suitable factorizations are available, and showing end behavior.
- HSF-IF.C.7e. Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude.
- HSF-IF.C.8. Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function.
- HSF-IF.C.8a. Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context.
- HSF-IF.C.8b. Use the properties of exponents to interpret expressions for exponential functions.[Show details](#)
- HSF-IF.C.9. Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions).[Show details](#)

Building Functions

HSF-BF.A. Build a function that models a relationship between two quantities.

- HSF-BF.A.1. Write a function that describes a relationship between two quantities.
- HSF-BF.A.1a. Determine an explicit expression, a recursive process, or steps for calculation from a context.
- HSF-BF.A.1b. Combine standard function types using arithmetic operations.
- HSF-BF.A.1c. (+) Compose functions.
- HSF-BF.A.2. Write arithmetic and geometric sequences both recursively and with an explicit formula, use them to model situations, and translate between the two forms.

HSF-BF.B. Build new functions from existing functions.

- HSF-BF.B.3. Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$, $k f(x)$, $f(kx)$, and $f(x + k)$ for specific values of k (both positive and negative); find the value of k given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. Include recognizing even and odd functions from their graphs and algebraic expressions for them.
- HSF-BF.B.4. Find inverse functions.
- HSF-BF.B.4a. Solve an equation of the form $f(x) = c$ for a simple function f that has an inverse and write an expression for the inverse. For example, $f(x) = 2x^3$ for $x > 0$ or $f(x) = (x+1)/(x-1)$ for $x \neq 1$.
- HSF-BF.B.4b. (+) Verify by composition that one function is the inverse of another.
- HSF-BF.B.4c. (+) Read values of an inverse function from a graph or a table, given that the function has an inverse.
- HSF-BF.B.4d. (+) Produce an invertible function from a non-invertible function by restricting the domain.
- HSF-BF.B.5. (+) Understand the inverse relationship between exponents and logarithms and use this relationship to solve problems involving logarithms and exponents.

Linear, Quadratic, and Exponential Models**HSF-LE.A. Construct and compare linear and exponential models and solve problems.**

	<ul style="list-style-type: none"> • HSF-LE.A.1. Distinguish between situations that can be modeled with linear functions and with exponential functions. • HSF-LE.A.1a. Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals. • HSF-LE.A.1b. Recognize situations in which one quantity changes at a constant rate per unit interval relative to another. • HSF-LE.A.1c. Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another. • HSF-LE.A.2. Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs (include reading these from a table). • HSF-LE.A.3. Observe using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or (more generally) as a polynomial function. • HSF-LE.A.4. For exponential models, express as a logarithm the solution to $ab^{ct} = d$ where a, c, and d are numbers and the base b is 2, 10, or e; evaluate the logarithm using technology.
	HSF-LE.B. Interpret expressions for functions in terms of the situation they model.
	<ul style="list-style-type: none"> • HSF-LE.B.5. Interpret the parameters in a linear or exponential function in terms of a context.
Trigonometric Functions	
	HSF-TF.A. Extend the domain of trigonometric functions using the unit circle.
	<ul style="list-style-type: none"> • HSF-TF.A.1. Understand radian measure of an angle as the length of the arc on the unit circle subtended by the angle. • HSF-TF.A.2. Explain how the unit circle in the coordinate plane enables the extension of trigonometric functions to all real numbers, interpreted as radian measures of angles traversed counterclockwise around the unit circle. • HSF-TF.A.3. (+) Use special triangles to determine geometrically the values of sine, cosine, tangent for $\pi/3$, $\pi/4$ and $\pi/6$, and use the unit circle to express the values of sine, cosines, and tangent for x, $\pi + x$, and $2\pi - x$ in terms of their values for x, where x is any real number. • HSF-TF.A.4. (+) Use the unit circle to explain symmetry (odd and even) and periodicity of trigonometric functions.
	HSF-TF.B. Model periodic phenomena with trigonometric functions.
	<ul style="list-style-type: none"> • HSF-TF.B.5. Choose trigonometric functions to model periodic phenomena with specified amplitude, frequency, and midline. • HSF-TF.B.6. (+) Understand that restricting a trigonometric function to a domain on which it is always increasing or always decreasing allows its inverse to be constructed. • HSF-TF.B.7. (+) Use inverse functions to solve trigonometric equations that arise in modeling contexts; evaluate the solutions using technology, and interpret them in terms of the context.
	HSF-TF.C. Prove and apply trigonometric identities.

- HSF-TF.C.8. Prove the Pythagorean identity $\sin^2(\theta) + \cos^2(\theta) = 1$ and use it to calculate trigonometric ratios.
- HSF-TF.C.9. (+) Prove the addition and subtraction formulas for sine, cosine, and tangent and use them to solve problems.

Congruence

CCSS: HS: Geometry

HSG-CO.A. Experiment with transformations in the plane

- HSG-CO.A.1. Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc.
- HSG-CO.A.2. Represent transformations in the plane using, e.g., transparencies and geometry software; describe transformations as functions that take points in the plane as inputs and give other points as outputs. Compare transformations that preserve distance and angle to those that do not (e.g., translation versus horizontal stretch).
- HSG-CO.A.3. Given a rectangle, parallelogram, trapezoid, or regular polygon, describe the rotations and reflections that carry it onto itself.
- HSG-CO.A.4. Develop definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments.
- HSG-CO.A.5. Given a geometric figure and a rotation, reflection, or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software. Specify a sequence of transformations that will carry a given figure onto another.

HSG-CO.B. Understand congruence in terms of rigid motions

- HSG-CO.B.6. Use geometric descriptions of rigid motions to transform figures and to predict the effect of a given rigid motion on a given figure; given two figures, use the definition of congruence in terms of rigid motions to decide if they are congruent.
- HSG-CO.B.7. Use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent.
- HSG-CO.B.8. Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions.

HSG-CO.C. Prove geometric theorems

- HSG-CO.C.9. Prove theorems about lines and angles. Show details
- HSG-CO.C.10. Prove theorems about triangles. Show details
- HSG-CO.C.11. Prove theorems about parallelograms. Show details

HSG-CO.D. Make geometric constructions

- HSG-CO.D.12. Make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc). Copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing perpendicular lines, including the perpendicular bisector of a line segment; and constructing a line parallel to a given line through a point not on the line.
- HSG-CO.D.13. Construct an equilateral triangle, a square and a regular hexagon inscribed in a circle.

Similarity, Right Triangles, & Trigonometry

HSG-SRT.A. Understand similarity in terms of similarity transformations

- HSG-SRT.A.1. Verify experimentally the properties of dilations:
 - HSG-SRT.A.1a. A dilation takes a line not passing through the center of the dilation to a parallel line, and leaves a line passing through the center unchanged.
 - HSG-SRT.A.1b. The dilation of a line segment is longer or shorter in the ratio given by the scale factor.
- HSG-SRT.A.2. Given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar; explain using similarity transformations the meaning of similarity for triangles as the equality of all pairs of angles and the proportionality of all pairs of sides.
- HSG-SRT.A.3. Use the properties of similarity transformations to establish the AA criterion for similarity of triangles.

HSG-SRT.B. Prove theorems involving similarity

- HSG-SRT.B.4. Prove theorems about triangles using similarity transformations.
- HSG-SRT.B.5. Use triangle congruence and similarity criteria to solve problems and to prove relationships in geometric figures.

HSG-SRT.C. Define trigonometric ratios and solve problems involving right triangles

- HSG-SRT.C.6. Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles.
- HSG-SRT.C.7. Explain and use the relationship between the sine and cosine of complementary angles.
- HSG-SRT.C.8. Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems.

HSG-SRT.D. Apply trigonometry to general triangles

- HSG-SRT.D.9. (+) Derive the formula $A = \frac{1}{2} ab \sin C$ for the area of a triangle by drawing an auxiliary line from a vertex perpendicular to the opposite side.
- HSG-SRT.D.10. (+) Prove the Laws of Sines and Cosines and use them to solve problems.
- HSG-SRT.D.11. (+) Understand and apply the Law of Sines and the Law of Cosines to find unknown measurements in right and non-right triangles (e.g., surveying problems, resultant forces).

Circles

HSG-C.A. Understand and apply theorems about circles	
	<ul style="list-style-type: none"> • HSG-C.A.1. Prove that all circles are similar. • HSG-C.A.2. Identify and describe relationships among inscribed angles, radii, and chords. Include the relationship between central, inscribed and circumscribed angles; inscribed angles on a diameter are right angles; the radius of a circle is perpendicular to the tangent where the radius intersects the circle. • HSG-C.A.3. Construct the inscribed and circumscribed circles of a triangle, and prove properties of angles for a quadrilateral inscribed in a circle. • HSG-C.A.4. (+) Construct a tangent line from a point outside a given circle to the circle.
HSG-C.B. Find arc lengths and areas of sectors of circles	
	<ul style="list-style-type: none"> • HSG-C.B.5. Derive using similarity the fact that the length of the arc intercepted by an angle is proportional to the radius, and define the radian measure of the angle as the constant of proportionality; derive the formula for the area of a sector.
Expressing Geometric Properties with Equations	
HSG-GPE.A. Translate between the geometric description and the equation for a conic section	
	<ul style="list-style-type: none"> • HSG-GPE.A.1. Derive the equation of a circle of given center and radius using the Pythagorean Theorem; complete the square to find the center and radius of a circle given by an equation. • HSG-GPE.A.2. Derive the equation of a parabola given a focus and directrix. • HSG-GPE.A.3. (+) Derive the equations of ellipses and hyperbolas given two foci for the ellipse, and two directrices of a hyperbola.
HSG-GPE.B. Use coordinates to prove simple geometric theorems algebraically	
	<ul style="list-style-type: none"> • HSG-GPE.B.4. Use coordinates to prove simple geometric theorems algebraically. • HSG-GPE.B.5. Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems (e.g., find the equation of a line parallel or perpendicular to a given line that passes through a given point). • HSG-GPE.B.6. Find the point on a directed line segment between two given points that divide the segment in a given ratio. • HSG-GPE.B.7. Use coordinates to compute perimeters of polygons and areas for triangles and rectangles, e.g. using the distance formula.
Geometric Measurement & Dimension	
HSG-GMD.A. Explain volume formulas and use them to solve problems	
	<ul style="list-style-type: none"> • HSG-GMD.A.1. Give an informal argument for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone. Use dissection arguments, Cavalieri's principle, and informal limit arguments. • HSG-GMD.A.2. (+) Given an informal argument using Cavalieri's principle for the formulas for the volume of a sphere and other solid figures. • HSG-GMD.A.3. Use volume formulas for cylinders, pyramids, cones and spheres to solve problems.

HSG-GMD.B. Visualize the relation between two-dimensional and three-dimensional objects
<ul style="list-style-type: none"> • HSG-GMD.B.4. Identify cross-sectional shapes of slices of three-dimensional objects, and identify three-dimensional objects generated by rotations of two-dimensional objects.
Modeling with Geometry
HSG-MG.A. Apply geometric concepts in modeling situations
<ul style="list-style-type: none"> • HSG-MG.A.1. Use geometric shapes, their measures and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder). • HSG-MG.A.2. Apply concepts of density based on area and volume in modeling situations (e.g., persons per square mile, BTUs per cubic foot). • HSG-MG.A.3. Apply geometric methods to solve design problems (e.g., designing an object or structure to satisfy constraints or minimize cost; working with typographic grid systems based on ratios).
Interpreting Categorical & Quantitative Data
CCSS: HS: Stats/Prob
HSS-ID.A. Summarize, represent, and interpret data on a single count or measurement variable
<ul style="list-style-type: none"> • HSS-ID.A.1. Represent data with plots on the real number line (dot plots, histograms, and box plots). • HSS-ID.A.2. Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets. • HSS-ID.A.3. Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers). • HSS-ID.A.4. Use the mean and standard deviation of a data set to fit it to a normal distribution and to estimate population percentages. Recognize that there are data sets for which such a procedure is not appropriate. Use calculators, spreadsheets and tables to estimate areas under the normal curve.
HSS-ID.B. Summarize, represent, and interpret data on two categorical and quantitative variables
<ul style="list-style-type: none"> • HSS-ID.B.5. Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal and conditional relative frequencies). Recognize possible associations and trends in the data. • HSS-ID.B.6. Represent data on two quantitative variables on a scatter plot and describe how the variables are related. • HSS-ID.B.6a. Fit a function to the data; use functions fitted to data to solve problems in the context of the data. Use given functions or choose a function suggested by the context. Emphasize linear, quadratic, and exponential models. • HSS-ID.B.6b. Informally assess the fit of a model function by plotting and analyzing residuals. • HSS-ID.B.6c. Fit a linear function for scatter plots that suggest a linear association.
HSS-ID.C. Interpret linear models

- HSS-ID.C.7. Interpret the slope (rate of change) and the intercept (constant term) of a linear fit in the context of the data.
- HSS-ID.C.8. Compute (using technology) and interpret the correlation coefficient of a linear fit.
- HSS-ID.C.9. Distinguish between correlation and causation.

Making Inferences & Justifying Conclusions

HSS-IC.A. Understand and evaluate random processes underlying statistical experiments

- HSS-IC.A.1. Understand that statistics is a process for making inferences about population parameters based on a random sample from that population.
- HSS-IC.A.2. Decide if a specified model is consistent with results from a given data-generating process, e.g. using simulation.*Show details*

HSS-IC.B. Make inferences and justify conclusions from sample surveys, experiments and observational studies

- HSS-IC.B.3. Recognize the purposes of and differences among sample surveys, experiments and observational studies; explain how randomization relates to each.
- HSS-IC.B.4. Use data from a sample survey to estimate a population mean or proportion; develop a margin of error through the use of simulation models for random sampling.
- HSS-IC.B.5. Use data from a randomized experiment to compare two treatments; justify significant differences between parameters through the use of simulation models for random assignment.
- HSS-IC.B.6. Evaluate reports based on data.

Conditional Probability & the Rules of Probability

HSS-CP.A. Understand independence and conditional probability and use them to interpret data

- HSS-CP.A.1. Describe events as subsets of a sample space (the set of outcomes) using characteristics (or categories) of the outcomes, or as unions, intersections, or complements of other events (“or,” “and,” “not”).
- HSS-CP.A.2. Understand that two events A and B are independent if the probability of A and B occurring together is the product of their probabilities, and use this characterization to determine if they are independent.
- HSS-CP.A.3. Understand the conditional probability of A given B as $P(A \text{ and } B)/P(B)$, and interpret independence of A and B as saying that the conditional probability of A given B is the same as the probability of A, and the conditional probability of B given A is the same as the probability of B.
- HSS-CP.A.4. Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified. Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities.
- HSS-CP.A.5. Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations.*Show details*

HSS-CP.B. Use the rules of probability to compute probabilities of compound events in a uniform probability model

- HSS-CP.B.6. Find the conditional probability of A given B as the fraction of B's outcomes that also belong to A and interpret the answer in terms of the model.
- HSS-CP.B.7. Apply the Addition Rule, $P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$, and interpret the answer in terms of the model.
- HSS-CP.B.8. (+) Apply the general Multiplication Rule in a uniform probability model, $P(A \text{ and } B) = P(A)P(B|A) = P(B)P(A|B)$, and interpret the answer in terms of the model.
- HSS-CP.B.9. (+) Use permutations and combinations to compute probabilities of compound events and solve problems.

Using Probability to Make Decisions**HSS-MD.A. Calculate expected values and use them to solve problems**

- HSS-MD.A.1. (+) Define a random variable for a quantity of interest by assigning a numerical value to each event in a sample space; graph the corresponding probability distribution using the same graphical displays as for data distributions.
- HSS-MD.A.2. (+) Calculate the expected value of a random variable; interpret it as the mean of the probability distribution.
- HSS-MD.A.3. (+) Develop a probability distribution for a random variable defined for a sample space in which theoretical probabilities can be calculated; find the expected value.
- HSS-MD.A.4. (+) Develop a probability distribution for a random variable defined for a sample space in which probabilities are assigned empirically; find the expected value. [Show details](#)

HSS-MD.B. Use probability to evaluate outcomes of decisions

- HSS-MD.B.5. (+) Weigh the possible outcomes of a decision by assigning probabilities to payoff values and finding expected values.
- HSS-MD.B.5a. Find the expected payoff for a game of chance. [Show details](#)
- HSS-MD.B.5b. Evaluate and compare strategies on the basis of expected values.
- HSS-MD.B.6. (+) Use probabilities to make fair decisions
- HSS-MD.B.7. (+) Analyze decisions and strategies using probability concepts [Show details](#)

Mathematical Practice**CCSS: Grade 6**

MP. The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.

- MP.1. Make sense of problems and persevere in solving them.
- MP.2. Reason abstractly and quantitatively.
- MP.3. Construct viable arguments and critique the reasoning of others.
- MP.4. Model with mathematics.
- MP.5. Use appropriate tools strategically.
- MP.6. Attend to precision.
- MP.7. Look for and make use of structure.
- MP.8. Look for and express regularity in repeated reasoning.

CCSS: Grade 7

MP.The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.

- MP.1. Make sense of problems and persevere in solving them.
- MP.2. Reason abstractly and quantitatively.
- MP.3. Construct viable arguments and critique the reasoning of others.
- MP.4. Model with mathematics.
- MP.5. Use appropriate tools strategically.
- MP.6. Attend to precision.
- MP.7. Look for and make use of structure.
- MP.8. Look for and express regularity in repeated reasoning.

CCSS: Grade 8

MP.The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.

- MP.1. Make sense of problems and persevere in solving them.
- MP.2. Reason abstractly and quantitatively.
- MP.3. Construct viable arguments and critique the reasoning of others.
- MP.4. Model with mathematics.
- MP.5. Use appropriate tools strategically.
- MP.6. Attend to precision.
- MP.7. Look for and make use of structure.
- MP.8. Look for and express regularity in repeated reasoning.

CCSS: HS: Num/Quantity

MP.The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.

- MP.1. Make sense of problems and persevere in solving them.
- MP.2. Reason abstractly and quantitatively.
- MP.3. Construct viable arguments and critique the reasoning of others.
- MP.4. Model with mathematics.
- MP.5. Use appropriate tools strategically.
- MP.6. Attend to precision.
- MP.7. Look for and make use of structure.
- MP.8. Look for and express regularity in repeated reasoning.

CCSS: HS: Algebra

MP.The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.

- MP.1. Make sense of problems and persevere in solving them.
- MP.2. Reason abstractly and quantitatively.
- MP.3. Construct viable arguments and critique the reasoning of others.
- MP.4. Model with mathematics.
- MP.5. Use appropriate tools strategically.
- MP.6. Attend to precision.
- MP.7. Look for and make use of structure.
- MP.8. Look for and express regularity in repeated reasoning.

CCSS: HS: Functions

MP.The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.

- MP.1. Make sense of problems and persevere in solving them.
- MP.2. Reason abstractly and quantitatively.
- MP.3. Construct viable arguments and critique the reasoning of others.
- MP.4. Model with mathematics.
- MP.5. Use appropriate tools strategically.
- MP.6. Attend to precision.
- MP.7. Look for and make use of structure.
- MP.8. Look for and express regularity in repeated reasoning.

CCSS: HS: Modeling

MP.The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.

- MP.1. Make sense of problems and persevere in solving them.
- MP.2. Reason abstractly and quantitatively.
- MP.3. Construct viable arguments and critique the reasoning of others.
- MP.4. Model with mathematics.
- MP.5. Use appropriate tools strategically.
- MP.6. Attend to precision.
- MP.7. Look for and make use of structure.
- MP.8. Look for and express regularity in repeated reasoning.

CCSS: HS: Geometry

MP.The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.

- MP.1. Make sense of problems and persevere in solving them.
- MP.2. Reason abstractly and quantitatively.
- MP.3. Construct viable arguments and critique the reasoning of others.
- MP.4. Model with mathematics.
- MP.5. Use appropriate tools strategically.
- MP.6. Attend to precision.
- MP.7. Look for and make use of structure.
- MP.8. Look for and express regularity in repeated reasoning.

CCSS: HS: Stats/Prob

MP. The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.

- MP.1. Make sense of problems and persevere in solving them.
- MP.2. Reason abstractly and quantitatively.
- MP.3. Construct viable arguments and critique the reasoning of others.
- MP.4. Model with mathematics.
- MP.5. Use appropriate tools strategically.
- MP.6. Attend to precision.
- MP.7. Look for and make use of structure.
- MP.8. Look for and express regularity in repeated reasoning.



Performing Arts: Drama



Chadwick International Performing Arts Philosophy Statement

The performing arts are a powerful mode of communication through which students explore and construct a sense of self while developing an understanding of the world through the lens of time, place and culture. They provide students with a wide range of opportunities and means to respond to their experiences, cultivating an internationally-minded perspective. The performing arts engage students in creative processes through which they explore and experiment in a continual cycle of action and reflection. Students are stimulated to think and articulate their thoughts in new ways, and through a variety of media and technologies. Learning about and through performing arts is fundamental to the development of the whole child, promoting creativity, critical thinking, problem-solving, self-efficacy, and social-emotional well-being. Engagement in the arts is gratifying and will encourage students to continue creating and appreciating art throughout their lives.

Performing Arts Assessment Philosophy

Assessment in the performing arts is a tool to inform teaching and learning through a continual cycle of action and reflection. Through this process, approaches to learning in creativity, risk-taking, collaboration, and communication are developed. It is an engaging, rigorous, and rewarding process, designed to help cultivate awareness of developing student artists. Students engage in formative tasks to gauge their development and summative assessments to show their learning in real-world contexts. Students are assessed on final outcomes as well as their engagement in the process of making art. Assessment is developmentally appropriate and designed to meet the specific needs of individualized learners.

Elements of Drama PreK - Kindergarten

Role, character and relationship

- Takes on the point of view of a fictional character and listens and responds in role to others in role
- Establishes a fictional setting and relates to it in role

Voice and movement

- Uses voice, for example, varying loudness/softness, pace and pitch
- Uses body language, for example, using posture, gestures, facial expressions, to create role and situation

Audience

- Recognizes that the purpose of drama is to communicate and share ideas with others.

Elements of Drama Grade 1

Role, character and relationship

- Takes on the point of view of a fictional character and listens and responds in role to others in role
- Establishes a fictional setting and relating to it in role

Voice and movement

- Uses voice, for example, varying loudness/softness, pace and pitch
- Uses body language, for example, using posture, gestures, facial expressions, to create role and situation

Audience

- Recognizes that the purpose of drama is to communicate and share ideas with others.

Elements of Drama Grade 2

Role, character and relationship

- Takes on the point of view of a fictional character and listening and responding in role to others in role

-
- Establishes a fictional setting and relates to it in role

Voice and movement

- Uses voice, for example, varying loudness/softness, pace and pitch
- Uses body language, for example, using posture, gestures, facial expressions, to create role and situation

Audience

- Recognizes that the purpose of drama is to communicate and share ideas with others.

Elements of Drama Grade 3

Role and character

- Takes on the point of view of a fictional character and listening and respond in role to others in role
- Takes on the point of view of a fictional character and listens and responds in role to others in role and maintaining focus in role
- Develops relationships between characters in a drama

Voice and movement

- Uses movement and gesture to create belief in character and situation
- Manipulates time in drama; using blocking (for example, when and where to move) and stage areas (for ex, upstage right, downstage centre) in planning and performance

Audience

- Recognizes that the purpose of drama is to communicate and share ideas with others.

Elements of Drama Grade 4

Role and character

- Develops relationships between characters in a drama
- Adopts a role and maintaining focus in role
- Uses dialogue to show relationships
- Establishes a fictional setting using space and time
- Adopts a role and maintaining focus in role; character; communicating role traits; relationships; developing relationships between characters in a drama, for example, using dialogue to show relationships

Voice and movement

- Projects voice when speaking when speaking on stage
- Speaks clearly when speaking on stage
- Uses an expressive voice when delivering line
- Delivers lines at a comfortable rate
- Uses various volumes and pauses to enhance the scene and inform the audience
- Uses movement and gesture to create belief in character and situation
- Frames point of view, situation and characters in drama

-
- Establishes a clear setting and sense of time to create belief in the drama

Language, Ideas and Dramatic Action

- Creates ideas or themes that give drama consistency

Audience

- Recognizes that the purpose of drama is to communicate and share ideas with others.

Elements of Drama Grade 5

Role and character

- Analyzes and portrays how relationships influence character development
- Sustains a fictional setting using space and time
- Adopts a role and maintains focus in role; character; communicating role traits; relationships; develops relationships between characters in a drama, for example, using dialogue to show relationships

Voice and movement

- Projects voice when speaking when speaking on stage
- Speaks clearly when speaking on stage
- Uses an expressive voice when delivering line
- Delivers lines at a comfortable rate
- Uses movement, facial expression and gestures to create and sustain belief in character and situation
- Sustains a clear setting and sense of time to create belief in the drama

Language, Ideas and Dramatic Action

- Creates a mood and atmosphere through the use of physical space and dramatic actions performed
- Frames drama to highlight and communicate key story elements and characters' motivations

Audience

- Recognizes that the purpose of drama is to communicate and share ideas with others.

Elements of Drama Grade 6

Role and character

- Creates the inner and outer world of a character
- Differentiates between characters
- Analyzes and portrays how relationships influence character development
- Sustains a fictional setting using space and time

Voice and movement

- Varies voice, for example, clarity, pace, volume and projection
- Uses movement, facial expression and gestures to create and sustain belief in character and situation

-
- Frames drama to highlight and communicate key story elements and characters' motivations
 - Uses factors that contribute to tension or suspense in stories and tension in characters' relationships, for example, using sound, light and technology to heighten tension/suspense
 - Sustains a clear setting and sense of time to create belief in the drama

Language, ideas and dramatic action

- Creates ideas or themes that give perspectives and ideas to the audience
- Creates a mood or atmosphere through the feeling or tone of physical space and the dramatic action created by or emerging from the performance

Audience

- Shapes and sustains drama for others using the elements of drama to communicate meanings

Elements of Drama Grade 7

Role and character

- Creates the inner and outer world of a character
- Differentiates between characters
- Analyzes and portrays how relationships influence character development
- Sustains a fictional setting using space and time

Voice and movement

- Varies voice, for example, clarity, pace, volume and projection
- Uses movement, facial expression and gestures to create and sustain belief in character and situation
- Frames drama to highlight and communicate key story elements and characters' motivations
- Uses factors that contribute to tension or suspense in stories and tension in characters' relationships, for example, using sound, light and technology to heighten tension/suspense
- Sustains a clear setting and sense of time to create belief in the drama

Language, ideas and dramatic action

- Creates ideas or themes that give perspectives and ideas to the audience
- Mood and atmosphere - the feeling or tone of physical space and the dramatic action created by or emerging from the performance

Audience

- Shaping and sustaining drama for others using the elements of drama to communicate meanings.

Elements of Drama Grade 8

Role, character and relationships

- Role and character - maintaining commitment to role
- Role and character - exploring motivations and various facets of multidimensional characters
- Role and character - developing and analysing multidimensional relationships in the drama
- Situation - improvising with/adapting available materials and technologies to establish setting
- Situation - using conventions of story in drama

Voice and movement

- Sustaining belief in character and situation through voice and movement
- Revealing character and situation through the use of voice, movement/blocking and props
- Making deliberate artistic choices about voice and movement to sharpen focus and heighten tension
- Space and time - using rhythm and pace to enhance drama; using blocking and stage areas in planning and performance

Language, ideas and dramatic action

- Manipulating central ideas or themes to give perspectives and ideas to the audience
- Mood and atmosphere - the feeling or tone of physical space and the dramatic action created by or emerging from the performance

Audience

- Using narrative and non-narrative dramatic forms and production elements to shape and sustain drama for formal and informal audiences

Elements of Drama Grade 9 and 10

Role and character

- Role and character: analysing the context of character
- Role and character: sustaining multidimensional relationships to develop the interplay between characters
- Role and character: developing both scripted and devised characters
- Situation: utilising both props and costume to enhance characterization
- Applying theoretical approaches to characterisation

Voice and movement

- Sustaining belief in character and situation through voice and movement
- Application of voice modulation including pitch, pace, pause and inflection
- Practising mindfulness and relaxation to develop mind-body awareness
- Making deliberate artistic choices about voice and movement to sharpen focus and heighten tension
- Space and time: manipulating time in drama; using blocking and stage areas in planning and performance

Language, ideas and dramatic action

- Using a range of conventions to highlight central ideas for an audience
- Using conventions relevant to selected performance styles to manipulate central ideas or themes and offer perspectives to the audience
- Mood and atmosphere: using stage design to manipulate the feeling or tone of physical space and the dramatic action emerging from the performance

Audience

- Modifying production elements to suit different audiences



Performing Arts: Music



Pre-K

Elements of Music

Dynamics and expression

- Discriminates between and demonstrates loud and soft

Form and Structure

- Discriminates between and demonstrates the same and different in familiar songs

Pitch

- Discriminates between and demonstrates high and low sounds
- Discriminates between and demonstrates pitch direction (going up or down)
- Discriminates between and demonstrates fast and slow tempo
- Discriminates between and demonstrates long and short sounds
- Discriminates between and demonstrates sound and silence

Rhythm

- Discriminates between and demonstrates long and short sounds
- Discriminates between and demonstrates sound and silence

Skills

Performance

- Holds and plays classroom instruments safely and correctly
- Understands turn-taking in group music making

Kindergarten

Elements of Music

Rhythm

- Practices and performs music, reading from notation and learned symbols - (quarter note (ta), quarter note rest (za) , quarter note (ta), (titi)
- Plays in time to the beat
- Discriminates between high and low sounds
- Discriminates between and demonstrate - pitch direction (going up or down)
- Rehearses and performs music in unison and with accompaniment patterns - (Unison)

Pitch

- Discriminates between and demonstrate high and low sounds
- Discriminates between and demonstrate - pitch direction (going up or down)
- Rehearses and performs music in unison and with accompaniment patterns - (Unison)

Dynamics and expression

- Experiments with ways of singing and playing expressively such as learning and practicing a song with different dynamics - loud/soft

Form and structure

- Rehearses and performs music in different forms - same/different
- Recognizes patterns in given music
- Rehearses and performs music in different forms - echo

Timbre

- Recognizes how sound is produced including hit, blown, plucked and shaken

Skills

Performance

- Holds and plays classroom instruments safely and correctly
- Understands turn-taking in group music making
- Plays in time

Grade 1

Elements of Music

Rhythm

- Plays in time to the beat
- Moves and performs with an understanding of beat and tempo
- Experiments with ways of singing and playing expressively such as learning and practicing a song with different tempos
- Practices and performs music, reads from notation, invented and learned symbols - quarter note (ta), quarter rest (za), eighth notes in pairs (ti-ti), sixteenth notes in quads (tika-tika)

Pitch

- Imitates pitch patterns to develop aural recognition skills - (pitch matching, pitch direction - going up or down)
- Practices reading traditional notation in music as they rehearse and perform (me, soh, la)
- Rehearses and performs music in unison and with accompaniment patterns - (Unison)

Dynamics and expression

- Experiments with ways of singing and playing expressively such as learning and practicing a song with different dynamics - (loud (forte) f and soft (piano) p)

Form and structure

- Recognizes patterns in given music (rhythm & beat patterns)
- Rehearses and performs music in different forms - (repetition,intro and outro, verse, chorus, bridge, echo)

Timbre

- Recognizes every voice and instrument has its own distinct sound

Skills

Creating

- Using technology as a tool for music learning

Reflecting

- Using technology as a tool for music learning

Grade 2

Elements of Music

Rhythm

- Recognizes and discriminates between beat and rhythm
- Plays instruments in time to the beat
- Rehearses and performs music using an ostinato
- Experiments with ways of singing and playing expressively, such as learning and practicing a song with a different tempo
- Practices reading traditional and invented notation in music as they rehearse and perform - (quarter note, quarter rest, half note, eighth notes in pairs (titi))
- Experiences performing and creating music in duple and triple metres

Pitch

- Imitates pitch to develop aural recognition skills - (pitch matching)
- Matches given melodic shapes with songs students hear - (pitch matching)
- Practices reading traditional notation in music as they rehearse and perform
- Rehearses and performs music in unison and with accompaniment patterns - (Unison)

Dynamics and expression

- Experiments with ways of singing and playing expressively, such as learning and practicing a song with different dynamics - (loud ff (fortissimo), f (forte), mf (mezzo forte) and mp (mezzo piano), p (piano), pp (pianissimo))

Form and structure

- Rehearses and performs music in different forms - (Verse, chorus, bridge, introduction,, repetition, round)
- Imitates pitch patterns to develop aural recognition skills - (echo singing)
- Creates simple rhythm patterns to be performed as an ostinato.
- Performs simple rhythm patterns layered with an ostinato.

Timbre

- Recognizes that every voice and instrument has its own distinct sound

Texture

- Performs simple round songs with peers

Skills

Creating

- Uses technology as a tool for music learning

Reflecting

- Uses technology as a tool for music learning

Grade 3

Elements of Music

Rhythm

- Experiences performing and creating music in simple meters
- Uses notation to represent sound and record ideas
- Practices reading traditional and invented notation in music as they rehearse and perform - (Whole note/rest, Half note/rest, Quarter note/rest, Eighth note, Sixteenth note)

Pitch

- Rehearses, performs and creates music with pentatonic patterns
- Recognizes the difference between notes moving by step and by leap
- Practices reading traditional and invented notation in music as they rehearse and perform - (treble clef)

Dynamics and expression

- Experiments with ways of singing and playing expressively, such as learning and practicing a song with different dynamics - (loud ff (fortissimo), f (forte), mf (mezzo forte) and mp (mezzo piano) ,p (piano) , pp (pianissimo) , gradually getting louder (crescendo), gradually getting softer (decreasing))

Form and structure

- Rehearses and performs music in different forms - (question and answer (call and response))

Timbre

- Recognizes familiar instrumental timbres in isolation and combination

Texture

- Discriminates between melody and accompaniment
-
- Rehearses and performs music with melody and accompaniment

Skills

Performing

- Takes on different roles in group music making, for example, accompaniment, lead

Reflecting

- Uses technology as a tool for music making and performance

Grade 4

Elements of Music

Dynamics and expression

- Experiments with ways of singing and playing expressively, such as learning and a song with different articulation - (smoothly (legato), short and detached (staccato))
- Experiments with ways of singing and playing expressively, such as learning and practising a song with different dynamics - (loud ff (fortissimo), f (forte), mf (mezzo forte) and mp (mezzo piano) ,p (piano) , pp (pianissimo), gradually getting louder (crescendo), gradually getting softer (decrescendo)

Form and structure

- Recognizes and performs music in different forms - (binary (AB), ternary (ABA), theme and variation forms)
-
- Performs and understands the form of music with repeat signs

Pitch

- Uses notation to represent sound and record ideas
- Recognizes the difference between notes moving by step and by leap
- Practices reading traditional and invented notation in music as they rehearse and perform
- Explores given rhythm and pitch patterns to create music in the treble clef

Rhythm

- Discriminates between rhythm and beat
- Practices reading traditional and invented notation in music as they rehearse and perform - (Whole, Half, Quarter, Eighth and associated rests)
- Experiments with ways of singing and playing expressively, such as learning and practicing a song with different tempos (Accelrando, Ritardando)

Texture

- Performs a melody and accompaniment

Timbre

- Recognizes familiar instrumental timbres in isolation and combination

Harmony

- Performs and recognizes basic chord progressions I, IV and V

Grade 5

Elements of Music

Rhythm

- Practices reading traditional notation in music as they rehearse and perform - (Eighth note/rest, Sixteenth note/rest, Dotted Quarter note/rest)
- Experiments with ways of singing and playing expressively, such as learning and practicing a song with different tempos (Accelrando, Ritardando)

Pitch

- Explores pitch to create contrast, repetition, and balance to develop compositions for performance - (Treble and Bass Clef), (melodic Contour)

Dynamics and expression

- Experiments with ways of singing and playing expressively, such as learning and a song with different articulations - (smoothly (legato), detached (staccato), accent), Fermata

Form and structure

- Performs and understands phrasing in music
- Performs and understands the form of music with repeat signs
- Recognizes and performs music in different forms (song form - verse, prechorus, chorus, bridge, instrumental interlude, intro, outro, coda)

Timbre

- Recognizes familiar voice and instrumental types in isolation and combination
- Recognizes acoustic and electronic timbres in isolation and combination

Texture

- Combines two or more rhythmic or melodic patterns which occur simultaneously in different voices

Harmony

- Discriminates between dissonance and consonance in harmony
-

Skills

Performing

- Listens to others controlling volume and tone in ensemble activities
- Sings and plays independent parts against contrasting parts

Creating

- Uses available technology and digital media as a tool for music learning
- Uses technology as a tool for music making and performance

Grade 6

Elements of Music Grade 6

Rhythm

- Performs in and recognizes simple metres and time signatures
- Performs in and recognizes quarter, eighth, and sixteenth notes and rests.
- Performs in and recognizes dotted quarter notes and rests

Pitch

- Pentatonic and major scales
- Performs and recognizes sequences (riffs, arpeggios, scales)
- Reads pitches in bass and treble clef
- Recognizes and analyzes major key signatures

Dynamics and expression

- Smoothly (legato)
- Detached (staccato)
- Accent

Form and structure

- Recognizes, creates and performs phrases of music
- Repeat signs

Timbre

- Voice and instrument types
- Electronic sounds
- Acoustic

Texture

- Combines two or more rhythmic or melodic patterns which occur simultaneously in different voices
- Contrasts within layers of sound

Skills Grade 6

Performing

- Holds and plays instruments and uses their voices safely and correctly
- Sings and plays independent parts against contrasting parts
- Listens to others controlling volume and tone in ensemble activities

Analyzing

- Identifies and notates metre and rhythmic groupings

Creating

- Uses technology as a tool for music learning and to record their music

Grade 7

Elements of Music Grade 7

Rhythm

- Time signatures
- 16th note subdivisions
- Dotted notes
- Rests: Whole, half, quarter, dotted quarter note
- Rhythmic Device: Anacrusis
- Rhythmic Device: Syncopation
- Rhythmic Device: Ties
- Rhythmic Device: Pause

Pitch

- Melodies in pentatonic, major and minor scales
- Keys and key signatures
- Major and minor chords in primary triads (I, IV, V)
- Reading treble and bass clef
- Reading ledger lines

Dynamics and expression

- Dynamic gradations (p, mp, mf, f)
- Glissando
- Melismatic phrasing

Form and structure

- Repetition and contrast
- Call and response
- ABA Form

Timbre

- Recognises instrumental types and groups; voice types; acoustic and electronic sound

Texture

- Identifies layers of sound and their role (accompaniment and melody)
- Unison, homophonic (melody with chords)
- Polyphonic (two or more independent layers played simultaneously)

Skills Grade 7

Analyzing

- Recognizes rhythmic patterns and beat groupings
- Discriminates between pitches, recognizing intervals and familiar chord progressions
- Identifies and notates metre and rhythmic groupings
- Aurally identifies layers within a texture

Performing

-
- Imitates simple melodies and rhythms using voice and instruments
 - Performs with expression and technical control, correct posture and safety
 - Understands own role within an ensemble, balancing and controlling tone and volume
 - Holds and plays instruments and using their voices safely and correctly

Creating

- Uses technology as a tool for music learning and to record their music

Grade 8

Elements of Music Grade 8

Rhythm

- Time signatures
- 16th note subdivisions
- Dotted notes
- Rests: Whole, half, quarter, dotted quarter note
- Rhythmic Device: Anacrusis
- Rhythmic Device: Syncopation
- Rhythmic Device: Ties
- Rhythmic Device: Pause

Pitch

- Melodies in pentatonic, major and minor scales
- Keys and key signatures
- Major and minor chords in primary triads (I, IV, V)
- Reading treble and bass clef
- Reading ledger lines
- Chromatic Scales

Dynamics and expression

- Dynamic gradations (p, mp, mf, f)
- Glissando
- Pitch Bending
- Melismatic phrasing

Form and structure

- Repetition and contrast
- Call and response
- Digital sequences
- Theme and variation
- 12 bar blues
- Song structures including verse, chorus, bridge, middle 8, intro and outro

Timbre

- Recognizes instrumental types and groups; voice types; acoustic and electronic sound

Texture

- Identifies layers of sound and their role (accompaniment and melody)
- Unison, homophonic (melody with chords)
- Polyphonic (two or more independent layers played simultaneously)

Skills Grade 8

Analyzing

- Recognizes rhythmic patterns and beat groupings
- Discriminates between pitches, recognising intervals and familiar chord progressions
- Identifies and notates metre and rhythmic groupings
- Aurally identifies layers within a texture
- Identifies intervals.

Performing

- Imitates simple melodies and rhythms using voice and instruments
- Performs with expression and technical control, correct posture and safety
- Understands own role within an ensemble, balancing and controlling tone and volume
- Holds and plays instruments and uses voice to safely and correctly

Creating

- Uses technology as a tool for music learning and to record their music
- Counterpoint Composition: creates music with melodies and harmony working together.

Conducting

- Conducts own interpretation. Assign a portion of music to lead in rehearsal.

Grade 9

Elements of Music Grade 9

Rhythm

- Regular and irregular time signatures
- Beat subdivision in triplets and duplets
- Complex metres and required note groupings
- Rhythmic devices: syncopation
- Rhythmic devices: augmentation
- Rhythmic devices: diminution

Pitch

- Melodies and chords based in major, minor and modal scales
- Tonal Centers
- Modulation
- Consonance and dissonance
- Pitch Device: Riff
- Pitch Device: Ostinato
- Pitch Device: Pedal Note

Dynamics and expression

- Dynamic gradations (pp, p, mp, mf, f, ff)
- Articulations relevant to style

Form and structure

- Stylistic Structures: Theme
- Stylistic Structures: Hook
- Stylistic Structures: Motivic Development
- Stylistic Structures: Head
- Stylistic Structures: Sonata Form
- Stylistic Structures: Interlude
- Stylistic Structures: Improvisation

Timbre

- Identifies instruments by name and method of sound production

Texture

- Layers appropriate to style: Homophonic
- Layers appropriate to style: Polyphonic
- Layers appropriate to style: Countermelody

Skills Grade 9

Performing

- Music in more than two parts in a variety of styles
- Performs with expression, technical control and awareness of ensemble

Creating

- Cadences
- Uses technology as a tool for music learning and to record their music
- Genre Arrangement
- Innovative Music Composition in Rondo form

Grade 10

Elements of Music Grade 10

Rhythm

- Regular and irregular time signatures
- Beat subdivision in triplets and duplets
- Complex metres and required note groupings
- Rhythmic devices: syncopation
- Rhythmic devices: augmentation
- Rhythmic devices: diminution

Pitch

- Melodies and chords based in major, minor and modal scales
- Tonal Centers

-
- Modulation
 - Consonance and dissonance
 - Pitch Device: Riff
 - Pitch Device: Ostinato
 - Pitch Device: Pedal Note

Dynamics and expression

- Dynamic Gradations (pp, p, mp, mf, f, ff)
- Articulations Relevant to Style

Form and structure

- Stylistic Structures: Theme
- Stylistic Structures: Hook
- Stylistic Structures: Motivic Development
- Stylistic Structures: Head
- Stylistic Structures: Sonata Form
- Stylistic Structures: Interlude
- Stylistic Structures: Improvisation

Timbre

- Identifying instruments by name and method of sound production

Texture

- Layers appropriate to style: Homophonic
- Layers appropriate to style: Polyphonic
- Layers appropriate to style: Countermelody

Skills Grade 10

Performing

- Performs music in more than two parts in a variety of styles
- Performs with expression, technical control and awareness of ensemble

Creating

- Cadences
- Uses technology as a tool for music learning and to record their music
- Genre Arrangement
- Innovative Music Composition in Rondo form





Physical and Health Education

Early Years to Grade 1

Standard A: Active Living

A1.Active Living Standard: Participate actively and regularly in a wide variety of physical activities and identify how regular physical activity can be incorporated into their daily lives

- 1.A1.1a actively participate in a wide variety of program activities according to their capabilities (e.g., activity centre and circuit activities, tag games, parachute activities)
- 1.A1.1b applying behaviours that enhance their readiness and ability to take part (e.g., joining in willingly, showing respect for others, following directions, taking turns)
- 1.A1.2 demonstrate an understanding of factors that contribute to their personal enjoyment of being active (e.g., having the opportunity to participate fully in all aspects of an activity, having a comfortable environment for activities, being able to explore different ways of being active, having the opportunity to take part in activities that relate to their cultural background) as they participate in a wide variety of individual and small-group activities.
- 1.A1.3 identify a variety of ways to be physically active at school and at home (e.g., at school: playing actively at recess; participating in a variety of physical activities in class; participating in after-school physical activities; at home: helping with outdoor activities; going for a walk with family members; playing in the park; riding bikes on the community trail) school physical activities; at home: helping with outdoor activities like gardening, raking, or shoveling snow; going for a walk with family members; playing in the park; riding bikes on the community trail)

A2.Active Living Standard: Demonstrate an understanding of the importance of being physically active and apply physical fitness concepts and practices that contribute to healthy, active living

-
- 1.A2.1 participate in sustained moderate to vigorous physical activity, with appropriate warm-up and cool-down activities, to the best of their ability (e.g., doing an animal walk, a fitness circuit, parachute activities; galloping to music)
 - 1.A2.2 demonstrate an understanding of how being active helps them to be healthy
 - 1.A2.3 identify the physical signs of exertion during a variety of physical activities (e.g., heart beats faster, body gets warmer, breathing becomes faster and deeper, perspiration increases)

A3. Active Living Standard: Demonstrate responsibility for their own safety and the safety of others as they participate in physical activities.

- 1.A3.1 demonstrate behaviours and apply procedures that maximize their safety and that of others during physical activity (e.g., cooperating; listening carefully; wearing appropriate footwear; keeping a safe distance away from others while doing physical activities, either in class or on the playground; staying within defined boundaries; appropriate clothing)
- 1.A3.2 identify environmental factors that pose safety risks during their participation in physical activity (e.g. no running around the pool, awareness of environmental conditions (jackets in the winter, hat in the summer))

Standard B: Performance Competence - Skills, Concepts and Strategies

B1. Performance Competence - Skills, Concepts and Strategies Standard: Perform movement skills, demonstrating awareness of the basic requirements of the skills and applying movement concepts as appropriate, as they engage in a variety of physical activities

- 1.B1.1 perform a variety of static balances, using different body parts at different levels (e.g., low level: using different body parts as a base, crouch with weight balanced on hands and feet; medium level: stand and lean forward with arms outstretched; high level: stretch tall with arms overhead and legs wide apart)
- 1.B1.2 demonstrate the ability to move and stop safely and in control, with an awareness of people and equipment around them
- 1.B1.3 perform a variety of locomotor movements, traveling in different directions and using different body parts (e.g., jump over lines; walk carefully backwards along a line while looking over their shoulder; move forward with different body parts touching the ground; move arms in different ways while walking, dancing, or skipping; take giant steps while moving sideways)
- 1.B1.4 send objects of different shapes and sizes at different levels and in different ways, using different body parts (e.g., roll a ball along a line, throw a rubber chicken underhand to a chosen spot, kick a ball to a specific area, toss or drop a beanbag into a hula hoop, pass a sponge ball over their head to the next person in a short line who passes it between his or her legs to the next person)
- 1.B1.5 receive objects of different shapes and sizes at different levels and in different ways, using different body parts (e.g., catch or trap a ball with two hands, catch a beanbag that they toss themselves or that a partner tosses to them, stop a rolling ball with hands or feet)

B2. Performance Competence- Skills, Concepts and Strategies Standard: Apply movement strategies appropriately, demonstrating an understanding of the components of a variety of physical activities, in order to enhance their ability to participate successfully in those activities.

-
- 1.B2.1 demonstrate an understanding that different physical activities have different components (e.g., movement skills, basic rules and boundaries, conventions of fair play and etiquette)
 - 1.B2.2 apply this understanding of the different components as they participate in and explore a variety of individual and small-group activities
 - 1.B2.3 apply a variety of simple tactics to increase their chances of success while participating in and exploring physical activities (e.g., extend arms to improve stability when balancing on one foot; change speed, direction, or level to avoid being tagged; move closer to a target to increase the likelihood of success when sending an object)

Standard C: Healthy Living

C1. Healthy Living Standard: Demonstrate an understanding of factors that contribute to healthy development

- 1.C1.1 explain why people need food to have a healthy body (e.g., food provides energy for the healthy growth of teeth, skin, bones, muscles, and other body components)
- 1.C1.2 demonstrate an understanding of essential knowledge and practices for ensuring personal safety (PE: pool safety, safe handling of the equipment,..) (e.g., knowing their home phone numbers; knowing how to contact 9-1-1; seeking help from a police officer, teacher, elder, or other trusted adult; knowing routines for safe pick-up from school or activities)

C2. Health Living Standard: Demonstrate the ability to apply health knowledge and living skills to make reasoned decisions and take appropriate actions relating to their personal health and well-being;

- 1.C2.1 describe how the food groups in the Food Guide (i.e., vegetables and fruit, grain products, milk and alternatives, meat and alternatives) can be used to make healthy food choices
- 1.C2.2 demonstrate the ability to recognize caring behaviours (e.g., listening with respect, giving positive reinforcement, being helpful) and exploitative behaviours (e.g., inappropriate touching, verbal or physical abuse, bullying), and describe the feelings associated with each
- 1.C2.3 apply their knowledge of essential safety practices to take an active role in their own safety at school (e.g., play in supervised areas, follow safety routines
- - integrated in PE/ Safety routines
- 1.C2.4 observe and identify changes in the body while exercising (elevated heart rate, quicker breathing, red cheeks, elevated body temperature,..)

C3. Health Living Standard: Demonstrate the ability to make connections that relate to health and well-being – how their choices and behaviours affect both themselves and others, and how factors in the world around them affect their own and others' health and well-being.

- 1.C3.1 demonstrate an understanding of how to stay safe and avoid injuries to themselves and others in a variety of situations, using knowledge about potential risks at home, in the community, and outdoors (e.g., items or situations that could lead to poisoning, slips, falls, fire, or injury, including injuries from household products, medicines, kitchen tools and equipment, insecure furniture, candles, toys; road, water, and playground hazards; weather and sun hazards)

-
- 1.C3.2 identify habits and behaviours (e.g., excessive screen time or video game usage, smoking) that can be detrimental to health, and explain how people can be encouraged to adopt healthier alternatives

Standard D: Living Skills

D1.Living Skills Standard - Personal Skills: Demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in connection with the expectations in the Active Living, Performance Competence, and Healthy Living standards for this grade.

- 1.D1.1 use self-awareness and self-monitoring skills to help them understand their strengths and needs
- 1.D1.2 take responsibility for their actions
- 1.D1.3 monitor their own progress as they participate and develop in physical activities and movement competence (e.g., Active Living: ask themselves whether they are doing the best they can; Movement Competence: describe how they feel when they move in different ways; Healthy Living: ask themselves whether they used a tissue or did a “sleeve sneeze” to cover their nose and mouth when sneezing in order to avoid spreading germs)
- 1.D1.4 use adaptive, management and coping skills to help them respond to various challenges they encounter
- 1.D1.5 develop movement competence and acquirer knowledge and skills related to healthy living (e.g., Active Living: apply knowledge of safety procedures to make themselves feel safer and more confident as they play on the playground; Movement Competence: try to express themselves positively when they are excited or disappointed during a game or when they are learning a new skill; Healthy Living: be able to use proper terminology to name their body parts, so they can explain where they may be hurt or sore)

D2.Living Skills Standard - Interpersonal Skills: Demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in connection with the expectations in the Active Living, Performance Competence, and Healthy Living strands for this grade.

- 1.D2.1 communicate effectively, using verbal or non-verbal means, as appropriate, and interpret information accurately (e.g., Active Living: speak respectfully and pay attention to others when sharing equipment; Movement Competence: use eye contact, body cues, and words as needed to communicate clearly when sending and receiving objects; Healthy Living: effectively communicate feelings they might experience in response to caring behaviours and exploitive behaviours)
- 1.D2.2 apply relationship and social skills as they participate in physical activities through interacting positively with others, building healthy relationships, and becoming effective team members
- 1.D2.3 apply personal skills and interpersonal skills to promote positive interaction and avoid or manage conflict in social situations (e.g., Active Living: take turns when using equipment;
- 1.D2.4 Performance Competence: work cooperatively to share the space and try not to bump into others when moving around the gymnasium; Healthy Living: listen respectfully, paying attention to words and non-verbal signals such as facial expressions and tone of voice, to show they care about someone)

D3.Living Skills Standard - Critical and Creative Thinking: Demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in connection with the expectations in the Active Living, Performance Competence, and Healthy Living strands for this grade.

- 1.D3.1 use a range of critical and creative thinking skills and processes through making connections, planning and setting goals, analyzing and solving problems, making decisions, and evaluating choices (e.g., Active Living: make connections between being active and staying healthy; Performance Competence: use creative thinking skills to come up with new ways of moving and balancing – for instance, balancing on four body parts, three body parts, or five body parts; Healthy Living: make and explain choices that protect them from the sun, such as wearing a hat and applying sunscreen)

Grade 2

Standard A: Active Living

A1.Active Living Standard: participate actively and regularly in a wide variety of physical activities and identify how regular physical activity can be incorporated into their daily lives

- 2.A1.1a actively participate in a wide variety of program activities, according to their capabilities (e.g., individual and small-group activities, dancing to music, cooperative games)
- 2.A1.1b applying behaviours that enhance their readiness and ability to take part (e.g., being engaged and moving throughout the activity) and knowing what to do (demonstrating appropriate interpersonal skills, such as active listening, communicating with respect, and providing help to and asking for help from group members)
- 2.A1.2 demonstrate an understanding of factors that contribute to their personal enjoyment of being active (e.g., having the opportunity to participate fully in all aspects of an activity, being able to choose the activities they participate in and having choice within the activities, having adequate practice time, having access to safe outdoor play space, being able to take part in activities that are connected to their cultural background) as they participate in a wide variety of individual and small- group activities
- 2.A1.3 identify reasons for participating in physical activity every day (e.g., to have fun, learn through play, be with classmates who are involved in after-school physical activities, pursue personal interests in certain kinds of activities, enjoy a change from the classroom routine, emulate a role model, interact with family members, improve health, follow cultural teachings)

A2.Active Living Standard: demonstrate an understanding of the importance of being physically active and apply physical fitness concepts and practices that contribute to healthy, active living

- 2.A2.1 participate in sustained moderate to vigorous physical activity, with appropriate warm-up and cool-down activities, to the best of their ability (e.g., playing continuous tag games, skipping, using hula hoops)
- 2.A2.2 describe different types of activities that improve the strength of the heart and lungs (e.g. running, cycling, skipping, dancing to music, doing a fitness circuit, other whole-body or large muscle activities)

- 2.A2.3a recognize their degree of exertion in physical activities by using simple assessment methods (e.g., putting their hand on their chest to feel the increase in heart rate as they move faster, using the talk test [monitoring whether they can talk while being physically active])
- 2.A2.3b identify factors that affect their performance level (e.g., humidity, extremely cold or warm air, poor air quality, personal fitness level)
- 2.A2.4 participate in setting and achieving realistic personal and group goals related to physical activity (e.g., a personal goal of doing a physical activity for a specified period of time, a group goal of completing a collective number of class star jumps in a given time frame)

A3.Active Living Standard: demonstrate responsibility for their own safety and the safety of others as they participate in physical activities.

- 2.A3.1 demonstrate behaviours and apply procedures that maximize their safety and that of others during physical activity (e.g., being aware of personal space, warming up to prevent injury, taking turns when sharing equipment, avoiding overcrowding when using equipment both in class and on the playground, wear appropriate clothing)
- 3.A3.2 identify ways of protecting themselves and others, including those with medical conditions, from safety risks while participating in physical activity (no running around the pool, awareness of environmental conditions (jackets in the winter, hat in the summer))

Standard B: Performance Competence - Skills, Concepts and Strategies

B1.Performance Competence- Skills, Concepts and Strategies Standard: perform movement skills, demonstrating awareness of the basic requirements of the skills and applying movement concepts as appropriate, as they engage in a variety of physical activities

- 2.B1.1a perform a variety of static balances with and without equipment (e.g., balance on the floor, on a line, on a bench; balance objects on different body parts),
- 2.B1.1b perform a variety of static balances using different body parts at different levels and making different body shapes (e.g., low level – perform a V-sit: balance on buttocks with legs in the air, hold with muscles tight and legs together and arms either supporting the body or held at their sides; medium level – perform a standing scale: balance on one foot with the other leg stretched behind in the air, torso bent forward, and arms out parallel to the floor for balance; high level – perform a standing balance: using a walker for balance, lift one foot or one hand)
- 2.B1.2 demonstrate the ability to jump, hop, and land safely and in control, taking off from one foot or from two feet
- 2.B1.3 perform a variety of locomotor movements with and without equipment, traveling in different directions and at different speeds, and using different path- ways (e.g., hop sideways across a line, gallop in a curved pathway around trees or objects, skip quickly using a rope, slide or wheel slowly in a zigzag pattern, move at different speeds in response to the beat of a drum, run quickly following a curving pathway, jog slowly backwards while checking over their shoulder)
- 2.B1.4 send objects of different shapes and sizes at different levels and in different ways, using different body parts (e.g., slide a beanbag across the floor to a partner; throw a beanbag or ball underhand, using two hands or their dominant hand, and catch it or have a partner catch it; throw a disc through an upright hula hoop; kick a utility ball to a partner; strike a beach ball, using their hands, knees, chest, or foot)

-
- 2.B1.5 receive objects of different shapes and sizes at different levels and in various ways, using different body parts (e.g., stop a low bouncing ball with their hands or feet; catch or trap a beanbag that they or a partner toss, using two hands or their dominant hand)

B2.Performance Competence - Skills, Concepts and Strategies Standard: apply movement strategies appropriately, demonstrating an understanding of the components of a variety of physical activities, in order to enhance their ability to participate successfully in those activities.

- 2.B2.1a demonstrate an understanding that different physical activities have different components (e.g., movement skills, basic rules and boundaries, conventions of fair play and etiquette)
- 2.B2.1a apply this understanding of the different components as they participate in and explore a variety of individual and small-group activities
- 2.B2.2 apply a variety of simple tactics to increase their chances of success during physical activities (e.g. run into open space when playing tag games in order to more easily avoid being tagged; choose an object for a throwing activity that they think they can successfully throw and catch multiple times – a cloth ball, a utility ball, a tennis ball, a beanbag; use adapted or specialized equipment, such as a ball with a bell inside that can provide an auditory cue)

Standard C: Healthy Living

C1.Healthy Living Standard: demonstrate an understanding of factors that contribute to healthy development

- 2.C1.1 use the Food Guide to assess the nutritional value of meals (e.g., in terms of food groups and number and size of servings), and identify food and beverage choices that enhance healthy growth and development

C2.Healthy Living Standard: demonstrate the ability to apply health knowledge and living skills to make reasoned decisions and take appropriate actions relating to their personal health and well-being;

- 2.C2.1 explain the importance of standing up for themselves, and demonstrate the ability to apply behaviours that enhance their personal safety in threatening situations (e.g., speaking confidently; stating boundaries; saying no; respecting the right of a person to say no and encouraging others to respect that right also; reporting exploitive behaviours, such as improper touching of their bodies or others' bodies)

C3.Healthy Living Standard: demonstrate the ability to make connections that relate to health and well-being – how their choices and behaviours affect both themselves and others, and how factors in the world around them affect their own and others' health and well-being.

- 2.C3.1 describe how to relate positively to others (e.g., cooperate, show respect, smile, manage anger, pay attention to what people say and to their facial expressions and body language), and describe behaviours that can be harmful in relating to others (e.g., verbal abuse, including both online and face-to-face name calling, insults, and mocking; deliberately ignoring someone, or ignoring the feelings they express; physical violence, including pushing, kicking, and hitting)
- 2.C3.2 describe methods that may be used instead of or in combination with medication to maintain good health and prevent or treat various health problems (e.g., getting more sleep to help get rid of a cold; getting more fresh air and physical activity to relieve headaches; eating healthier meals as recommended in Food Guide; using natural healing practices)

Standard D: Living Skills

D1.Living Skills Standard - Personal Skills: demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in connection with the expectations in the Active Living, Performance Competence, and Healthy Living standards for this grade.

- 2.D1.1 use self-awareness and self-monitoring skills to help them understand their strengths and needs
- 2.D1.2 take responsibility for their actions
- 2.D1.3 monitor their own progress as they participate and develop in physical activities and movement competence (e.g., Active Living monitor their body's response to physical activity; Movement Competence: after jumping, consider what they did well as they tried to land in a stable position, and what they could do better; Healthy Living: complete a checklist to monitor their daily care of their teeth)
- 2.D1.4 use adaptive, management, and coping skills to help them respond to the various challenges they encounter as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living (e.g., Active Living: dress appropriately for outdoor activity; Performance Competence: describe the value of experimenting when trying new activities; Healthy Living: in response to teasing, try different solutions – walking away, telling the person to stop, telling the person how the teasing makes them feel, getting help)

D2.Living Skills Standard - Interpersonal Skills: demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in connection with the expectations in the Active Living, Performance Competence, and Healthy Living standards for this grade.

- 2.D2.1. communicate effectively, using verbal or non-verbal means, as appropriate, and interpret information accurately as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living (e.g., Active Living: to understand instructions properly, stop and look at the teacher when instructions are being given; Performance Competence: copy a partner's movements in a mirroring activity while standing face to face by following non-verbal signals and body language that indicate the movements; Healthy Living: listen respectfully to others when they voice objections and refuse to participate in behaviour that they do not like)
- 2.D2.2. apply relationship and social skills as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living to help them interact positively with others, build healthy relationships, and become effective team members (e.g., Active Living: demonstrate how they can help one another while using equipment; Performance Competence: work cooperatively with a partner when throwing and catching balls and other objects of varying sizes; Healthy Living: use positive language when talking to peers, as part of developing good relationships, and encourage others to do the same)

D3. Living Skills Standard - Critical and Creative Thinking: demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in

connection with the expectations in the Active Living, Performance Competence, and Healthy Living standards for this grade.

- 2.D3.1 use a range of critical and creative thinking skills and processes to assist them in making connections, planning and setting goals, analysing and solving problems, making decisions, and evaluating their choices in connection with learning in health and physical education (e.g., Active Living: explain how participating in moderate to vigorous activity is connected to better fitness and better health; describe what is needed to play safely and comfortably outside in different kinds of weather; Performance Competence: explore the use of many pieces of equipment and explain how each is different and why they prefer one over another; Healthy Living: explain how to stay safe by identifying household products that might be dangerous)

Grade 3

Standard A: Active Living

A1.Active Living Standard: participate actively and regularly in a wide variety of physical activities and identify how regular physical activity can be incorporated into their daily lives

- 3.A1.1 actively participate in a wide variety of program activities according to their capabilities (e.g., tag games, cooperative games, movement exploration with equipment, small sided invasion games, dance, outdoor activities),
- 3.A1.2 applying behaviours that enhance their readiness and ability to take part (e.g., trying new activities, being engaged and maintaining movement throughout the activity, actively cooperating with peers, having the required equipment to take part, accepting and showing respect for others in the group, listening actively, following rules, playing fair, discussions on what good winning and good losing looks like)
- 3.A1.3 demonstrate an understanding of factors that contribute to their personal enjoyment of being active (e.g., having the opportunity to participate fully in all aspects of an activity, having support from their peers, being exposed to a variety of activities, being outdoors) as they participate in a wide variety of individual and small-group activities
- 3.A1.4 describe the benefits of participating in physical activity every day (e.g., physical benefits, such as better sleep, more energy, reduced risk of getting sick; social benefits, such as improved interaction with peers, greater empathy, stronger interpersonal skills, improved independence; emotional/ mental benefits, such as stress release, greater self-confidence, improved concentration)

A2.Active Living Standard: demonstrate an understanding of the importance of being physically active and apply physical fitness concepts and practices that contribute to healthy, active living

- 3.A2.1 participate in sustained moderate to vigorous physical activity, with appropriate warm-up and cool-down activities, to the best of their ability (e.g., moving to music at a variety of speeds during warm-up, participating in a variety of dance activities, moving on scooter boards)
- 3.A2.2 identify new capabilities and other benefits that may result from improved cardiorespiratory fitness (e.g., being able to sustain activity over a greater distance or longer period of time, requiring shorter rest periods, feeling better after activity)

-
- 3.A2.3 assess their degree of physical exertion during cardiorespiratory fitness activities, using simple self-assessment methods (e.g., talk test, increase in heart rate or breathing rate, change in how one feels during the activity)
 - 3.A2.4 develop and act on personal goals related to physical activity (e.g., jumping rope continuously for a specified period of time, doing something active indoors or outdoors with family members on the weekend)

A3.Active Living Standard: demonstrate responsibility for their own safety and the safety of others as they participate in physical activities.

- 3.A3.1 demonstrate behaviours and apply procedures that maximize their safety and that of others during physical activity (e.g., self-monitoring, being in control of themselves and aware of their surroundings, cooperating with others, abiding by rules and playing fairly, communicating positively to help others be safe, using equipment appropriately both in class and on the playground)
- 3.A3.2 describe how to respond to accidents or injuries incurred while participating in physical activity (e.g., remain calm, stop all activity and hold the equipment, ask an injured person if he or she needs help, tell an adult what happened, avoid crowding the person who is injured)

Standard B: Performance Competence: Skills, Concepts, and Strategies

B1.Performance Competence: Skills, Concepts and Standard: perform movement skills, demonstrating awareness of the basic requirements of the skills and applying movement concepts as appropriate, as they engage in a variety of physical activities

- 3.B1.1 perform controlled transitions between static positions, using different body parts and shapes and different levels, with and without equipment (e.g., move smoothly between yoga positions, from a stork balance to a standing-scale balance, from a knee scale on a bench to a standing position on the bench)
- 3.B1.2 demonstrate the ability to jump for distance or height, using two-foot and one-foot take-offs, while remaining in control (e.g., jump high over lines or blocks; jump far past markers, over beanbags, or into a hula hoop that is held horizontally a short distance above the ground)
- 3.B1.3 perform a variety of locomotor movements with and without equipment, alone and with others, moving at different levels, using different pathways, and travelling in different directions (e.g., leap for distance in a zigzag pathway; alternate between walking and sprinting in a warm-up activity; travel sideways, alternately reaching high then bending low to touch the ground; move as close to others as possible without touching them, then far from others to find their own space; skip with a partner, matching their steps and arm actions; make patterns with a scarf; make up a movement sequence in response to action words or words of a poem)
- 3.B1.4 send and receive objects of different shapes and sizes in different ways, using different body parts, at different levels, and using various types of equipment (e.g., throw a sponge ball underhand and overhand through a hoop with their dominant hand; catch an object such as a rubber chicken or beanbag, using two hands both above and below the waist; throw and catch a ball, using scoops or soft lacrosse sticks, over a line, a low net, or a bench; kick a ball with the right foot and then the left to a partner in a specific targeted area and then receive it back; use specialized objects and equipment to assist with catching, such as a textured ring or ball for easier gripping)

-
- 3.B1.5 retain objects of different shapes and sizes in different ways, using different body parts and equipment (e.g., carry a beach ball while running and tag others with it in a game; balance a ball on a racquet; hold a plastic ball in a scoop while jogging; control a ball with right and left feet while moving around pylons; bounce a ball using dominant and non-dominant hands while seated or kneeling)

B2: Performance Competence: Skills, Concepts and Standard: apply movement strategies appropriately, demonstrating an understanding of the components of a variety of physical activities, in order to enhance their ability to participate successfully in those activities.

- 3.B2.1 demonstrate an understanding that different physical activities have different components (e.g., movement skills, rules and boundaries, conventions of fair play and etiquette)
- 3.B2.2 apply this understanding of the different components as they participate in and explore a variety of individual and small-group activities
- 3.B2.3 apply a variety of simple tactics to increase their chances of success during physical activities (e.g., assume a ready position in preparation to receive the ball when playing small-sided games such as two-on-two or to be ready for a quick start in a race; practise a balance routine on a line in the gymnasium while waiting for a turn on a balance beam or a bench)

Standard C: Healthy Living

C1. Healthy Living Standard: demonstrate an understanding of factors that contribute to healthy development

- 3.C1.1 identify the characteristics of healthy relationships (e.g., accepting differences, being inclusive, communicating openly, listening, showing mutual respect and caring, being honest)
- 3.C1.2 describe ways of overcoming challenges (e.g., bullying, exclusion, peer pressure, abuse) in a relationship
- 3.C1.3 identify factors (e.g., sleep, food, physical activity, heredity, environment, support from a caring adult, sense of belonging, peer influence) that affect physical development (e.g., of hair, skin, teeth, body size and shape) and/or emotional development (e.g., of self-awareness, adaptive skills, social skills)

Standard D: Living Skills

D1. Living Skills Standard - Personal Skills: demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in connection with the expectations in the Active Living, Performance Competence, and Healthy Living strands for this grade.

- 3.D1.1 use self-awareness and self-monitoring skills to help them understand their strengths and needs
- 3.D1.2 take responsibility for their actions
- 3.D1.3 recognize and describe sources of stress (competition in sports, balanced lifestyle)
- 3.D1.4 monitor their own progress as they participate and develop in physical activities and movement competence (e.g., Active Living: monitor their progress towards personal fitness goals, placing a sticker on the Active Living calendar on the fridge in their home each time they participate in a physical activity with a family member; Performance Competence: check whether they feel stable when performing static balances and adjust position if they do not;

Healthy Living: identify some of the characteristics that make them unique, and think about things they may have done or said that acknowledged the unique characteristics of others in a positive way or that were disrespectful or hurtful to others)

- 3.D1.5 use adaptive, management, and coping skills to help them respond to the various challenges they encounter as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living (e.g., Active Living: engage in a physical activity when they feel anxious or unhappy, to help make them feel better; Movement Competence: experiment with adopting a positive attitude if they are not feeling confident as they learn a new skill, and describe how doing so affects their skill development; Healthy Living: make sure that they are getting enough sleep and eating healthy food to help them learn and grow)

D2.Living Skills Standard - Interpersonal Skills: demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in connection with the expectations in the Active Living, Performance Competence, and Healthy Living strands for this grade.

- 3.D2.1. communicate effectively, using verbal or non-verbal means, as appropriate, and interpret information accurately as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living (e.g., Active Living: remind others about safety rules in a positive and supportive way; Performance Competence: talk with a partner to decide which piece of equipment to use and what distance to stand apart from each other in order to practise throwing and catching successfully; Healthy Living: explain to a friend who loves video games how real violence differs from fictional violence, and try to persuade that friend to choose less violent games)
- 3.D2.2 apply relationship and social skills as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living to help them interact positively with others, build healthy relationships, and become effective team members (e.g., Active Living: be willing to be anyone's partner for physical activities and be accepting of everyone when working in small groups; Performance Competence: interact positively with others when sharing space; Healthy Living: show leadership in identifying and avoiding peer pressure)

D3.Living Skills Standard - Critical and Creative Thinking: demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in connection with the expectations in the Active Living, Performance Competence, and Healthy Living strands for this grade.

- 3.1.5 use a range of critical and creative thinking skills and processes to assist them in making connections, planning and setting goals, analysing and solving problems, making decisions, and evaluating their choices in connection with learning in health and physical education (e.g., Active Living: come up with ideas for ways in which they could be physically active inside their family's house or apartment; Performance Competence: after performing a movement sequence, reflect on what they could have done differently to make the transitions from one movement to another smoother; Healthy Living: plan what they might bring to a family picnic, focusing on local foods, and give reasons for their choices)

Grade 4

Standard A: Active Living

A1.Active Living Standard: participate actively and regularly in a wide variety of physical activities and identify how regular physical activity can be incorporated into their daily lives

- 4.A1.1 actively participate in a wide variety of program activities according to their capabilities (e.g., lead-up and small- group games, recreational activities, cooperative games, fitness activities, dance activities)
- 4A1.2 applying behaviours that enhance their readiness and ability to take part (e.g., taking the initiative to be involved in the activity, being open to playing different positions and playing in different groups, respecting others' ideas and opinions, encouraging others, speaking kindly, maintaining self- control at all times)
- 4.A1.3 demonstrate an understanding of factors that contribute to their personal enjoyment of being active (e.g., knowing rules of etiquette and fair play will be observed, having the opportunity to think creatively and adapt activities to individual needs or preferences, being physically and emotionally comfortable in the activities), as they participate in a wide variety of individual and small-group activities and lead-up games
- 4.A1.4 identify factors that motivate participation in physical activity every day at school, at home, or in their communities (e.g., enjoyment; availability and cost of programs; proximity and accessibility of facilities such as community centres, lakes, or nature trails; availability of bike racks; support of family and peer group; cultural relevance of activities)

A2.Active Living Standard: demonstrate an understanding of the importance of being physically active and apply physical fitness concepts and practices that contribute to healthy, active living

- 4.A2.1 participate in sustained moderate to vigorous physical activity, with appropriate warm-up and cool-down activities, to the best of their ability (e.g., running, wheeling their wheelchair to music, skipping to music, doing light warm-up aerobic activity before stretching, doing parachute activities)
- 4.A2.2 identify how different physical activities affect the body and contribute to physical fitness and good health (e.g., dancing and cross-country running develop cardiorespiratory fitness and endurance, abdominal crunches develop muscular enduranceand/or strength, climbing activities develop muscular strength, yoga develops flexibility and muscular strength, proper stretching activities develop flexibility and prevent injury)
- 4.A2.3 assess their level of exertion during physical activity, using simple self-assessment techniques (e.g., taking pulse rates before, during, and after taking part in physical activities; checking how they feel during physical activity), and explain how intrinsic and extrinsic factors affect the exertion required to perform physical activities (e.g., intrinsic: level of fitness, state of health, energy level; extrinsic: familiarity with the activity; weather extremes such as heat, humidity, or cold)
- 4.A2.4 develop and act on personal fitness goals based on their interests, self-assessments, and feelings when participating in physical activity

A3.Active Living Standard: demonstrate responsibility for their own safety and the safety of others as they participate in physical activities.

- 4.A3.1 demonstrate behaviours and apply procedures that maximize their safety and that of others during physical activity (e.g., cooperating with others, monitoring their own actions and

maintaining control of their bodies and equipment, using equipment such as hula hoops, mini javelins, etc.)

- 4.A3.2 describe common precautions for preventing accidents and injuries while participating in different types of physical activity (e.g., wearing goggles to protect the eyes when playing badminton, wearing a properly fitting helmet to protect the head, tucking in drawstrings to avoid catching them on equipment or other players)

Standard B: Performance Competence: Skills, Concepts, and Strategies

B1. Performance Competence: Skills, Concepts, and Strategies Standard: perform movement skills, demonstrating awareness of the basic requirements of the skills and applying movement concepts as appropriate, as they engage in a variety of physical activities

- 4.B1.1 perform a variety of controlled static balances and transitions between balances, using a variety of body parts and shapes, at different levels, individually, and with partners and equipment (e.g., balance on a bench; balance with abdomen on an exercise ball; perform a four-point, three-point, and two-point balance, with weight on hands; stretch to hold a balance while reaching up while their partner holds a balance at a medium level)
- 4.B1.2 demonstrate the ability to jump and land, in control, from a low height (e.g., jump off a bench and land in a stable position)
- 4.B1.3 perform different combinations of locomotor movements with and without equipment, alone and with others, moving at different speeds and levels, using different pathways, and going in different directions (e.g., travel under, over, around, and through equipment in an obstacle course; hop and skip in a zigzag pattern, following a specific rhythm; run and leap over a line; use different levels while performing folk, cultural, and creative dances; perform t'ai chi or yoga movements slowly and at a moderate pace; wheel their wheelchair through an obstacle course, turn, and wheel back)
- 4.B1.4 send and receive objects of a variety of shapes and sizes at different levels and speeds, using different body parts and equipment, while applying basic principles of movement (e.g., balance on the balls of their feet to be ready to move when receiving; step forward with the opposite foot and use the whole body when throwing a ball to achieve maximum force; use a scoop to explore different ways of catching a ball or beanbag; perform underhand and overhand throws with their dominant and non-dominant hands while keeping their eyes on the target; kick or trap a ball at various heights while remaining aware of their surroundings; move their feet and transfer their weight backwards to absorb force when receiving; move arms or legs faster to send with more force; toss and catch scarves in front of their bodies, following a simple pattern, when learning to juggle)
- 4.B1.5 retain objects of various shapes and sizes in different ways, using different body parts, with and without equipment, while moving around others and equipment (e.g., hold a rubber ring close to their body while running; bounce and cradle a ball while pivoting during a rhythmic gymnastics routine; practise keeping their head up while dribbling a ball between pylons or people with their dominant and non-dominant hand and foot; keep a basketball on their lap while wheeling in a straight line; carry a ball in a scoop from one end of the gym to the other while avoiding contact with others)

B2.B1.Performance Competence: Skills, Concepts, and Strategies Standard: apply movement strategies appropriately, demonstrating an understanding of the components of a variety of physical activities, in order to enhance their ability to participate successfully in those activities.

- 4.B2.1 demonstrate an understanding of the basic components of physical activities (e.g., movement skills, game structures, basic rules and guidelines, conventions of fair play and etiquette)
- 4.B2.2 apply this understanding of the different components as they participate in a variety of physical activities (e.g., lead- up games such as two-on-two soccer, beach-ball volleyball, and small- group keep- away; recreational activities such as scooter-board activities, hula hoop challenges, and throwing and catching a disc; cooperative games, such as keep-it-up, team monster walk, and group juggling; fitness activities such as circuits, running, and flexibility exercises; dance activities such as creative movement, yoga stories)
- 4.B2.3 identify common features of specific categories of physical activities (e.g., individual, target, net/wall, striking/ fielding, territory)
- 4.B2.4 identify common strategies and tactics that they found effective while participating in a variety of physical activities in different categories
- 4.B2.5 apply a variety of tactical solutions to increase their chances of success as they participate in physical activities (e.g., individual activities: establish a breathing rhythm when swimming, use a video showing tricks and moves with a skipping rope to learn how to break down a new move into simpler steps; target activities: choose a larger target for optimal success; net/wall activities: assume a ready position that will allow them to be ready to move in a variety of directions to defend a space; striking/ fielding activities: throw or kick the ball away from fielders; territory activities: help their team keep possession of the ball by making short passes to teammates in a keep- away game or by changing directions quickly when dribbling a basketball)

Standard C: Healthy Living

C1.Healthy Living Standard: demonstrate an understanding of factors that contribute to healthy development

- 4.C1.1 identify the key nutrients (e.g., fat, carbohydrates, protein, vitamins, minerals) provided by foods and beverages
- 4.C1.2 describe the importance of the key nutrition for growth, health, learning, and physical performance
- 4.C1.3 describe various types of bullying and abuse (e.g., social, physical, verbal), including bullying using technology (e.g., via e-mail, text messaging, chat rooms, websites), and identify appropriate ways of responding

C2.Healthy Living Standard: - demonstrate the ability to apply health knowledge and living skills to make reasoned decisions and take appropriate actions relating to their personal health and well-being;

- 4.C2.1 analyse personal food selections through self-monitoring over time, using the criteria in the Food Guide (e.g., food groups, portion size, serving size)
- 4.C2.2 develop a simple healthy-eating goal appropriate to their age and activity level (e.g., eat breakfast every day; include at least one fruit or vegetable at each meal and snack; help with food shopping and meal preparation at home; plan a meal)

-
- 4.C2.3 apply a decision-making process (e.g., identify potential dangers and risks, consider ways to stay safe, consider the pros and cons of each option, consider whether they need to check with an adult, choose the safest option, act, reflect on their decision, consider whether there is anything they could improve for next time) to assess risks and make safe decisions in a variety of situations (e.g., when using a wheelchair, cycling, preparing food)

C3. Healthy Living Standard: demonstrate the ability to make connections that relate to health and well-being – how their choices and behaviours affect both themselves and others, and how factors in the world around them affect their own and others' health and well-being.

- 4.C3.1 identify ways of promoting healthier food choices in a variety of settings and situations (e.g., school, arena, recreation centre, stores, food courts, special events; when camping, having a snack or meal at a friend's house, eating on weekends versus weekdays)

Standard D: Living Skills

D1. Living Skills Standard: Personal Skills - demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in connection with the expectations in the Active Living, Performance Competence, and Healthy Living strands for this grade.

- 4.D1.1 use self-awareness and self-monitoring skills to help them understand their strengths and needs
- 4.D1.2 take responsibility for their actions
- 4.D1.3 recognize and describe sources of stress
- 4.D1.4 monitor their own progress as they participate and develop in physical activities and movement competence (e.g., Active Living: explain what makes them enjoy their favourite activities, and consider what this tells them about themselves; Performance Competence: identify which skills they perform with the most confidence and which ones are most difficult for them; Healthy Living: set a healthy eating goal for their age)
- 4.D1.5 use adaptive, management, and coping skills to help them respond to the various challenges they encounter as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living (e.g., Active Living: describe how joining a school-wide activity such as an intramural team or club can benefit them; Performance Competence: choose equipment that will help them succeed in learning a skill or refining a skill; Healthy Living: describe how being aware of their feelings can help them adjust to physical and emotional changes at puberty)

D2. Living Skills Standard: Interpersonal Skills - demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in connection with the expectations in the Active Living, Performance Competence, and Healthy Living strands for this grade.

- 4.D2.1. communicate effectively, using verbal or non-verbal means, as appropriate, and interpret information accurately as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living (e.g., Active Living: use encouraging words to support teammates when playing in small groups; Performance Competence: signal with one hand or another to indicate whether they want to receive a pass using their dominant or their non-dominant hand; Healthy Living: identify what a bystander could do or say when someone calls another person names)

-
- 4.D2.2. apply relationship and social skills as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living to help them interact positively with others, build healthy relationships, and become effective team members (e.g., Active Living: play fairly by maintaining self-control and sharing opportunities to play; Performance Competence: cooperate with group members to develop a creative movement sequence; Healthy Living: explain what they can do, when sending text messages or communicating online, to avoid saying something that they wouldn't say face to face; identify some of the teachings of cultures that can help them strengthen their own relationships)

D2. Living Skills Standard: Critical and Creative Thinking Skills - demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in connection with the expectations in the Active Living, Performance Competence, and Healthy Living strands for this grade.

- 4.1.5 use a range of critical and creative thinking processes to assist them in making connections, planning and setting goals, analysing and solving problems, making decisions, and evaluating their choices in connection with learning in health and physical education (e.g., Active Living: think through and apply the steps they will take to avoid injury while participating in a physical activity; Movement Competence: group different games and activities according to features they have in common; explore different body positions [arms up or down, body stretched or loose] when doing a log roll to determine which position works best for keeping the roll straight; Healthy Living: with a classmate, brainstorm ways of avoiding unhealthy behaviours or situations that make them feel uncomfortable, and list healthy alternatives)

Grade 5

Standard A: Active Living

A1.Active Living Standard: participate actively and regularly in a wide variety of physical activities and identify how regular physical activity can be incorporated into their daily lives

- 5.A1.1 actively participate in a wide variety of program activities according to their capabilities (e.g., lead-up games, recreational activities, fitness and endurance activities, dance)
- 5.A1.2 applying behaviours that enhance their readiness and ability to take part (e.g., encouraging others with positive comments, displaying fair play by respecting the decisions of others)
- 5.A1.3 demonstrate an understanding of factors that contribute to their personal enjoyment of being active (e.g., having the opportunity to modify games to make them more inclusive and to increase opportunities for participation, being exposed to new and different activities such as rubber chicken tag, having the opportunity to respond creatively to music and poetry, being able to take part in activities that emphasize healthy competition with themselves and others, having access to play spaces that are clean and attractive), as they participate in a wide variety of individual and small- group activities and lead-up games
- 5.A1.4 identify factors that can either motivate or make it difficult for people to be physically active every day (e.g., enjoyment; level of peer support; availability of transportation, equipment, time, and financial resources; availability of community resources; gender barriers or expectations; personal abilities; accessibility of facilities; personal organizational skills;

family responsibilities or curfews), and describe ways of overcoming obstacles to staying active.

A2.Active Living Standard: demonstrate an understanding of the importance of being physically active and apply physical fitness concepts and practices that contribute to healthy, active living

- 5.A2.1 participate in sustained moderate to vigorous physical activity, with appropriate warm-up and cool-down activities, to the best of their ability for a minimum of twenty minutes each day (e.g., power walking, wheeling, playing small-sided games, skipping rope)
- 5.A2.2 identify the components of health-related fitness (e.g., cardiorespiratory endurance, muscular strength, muscular endurance, flexibility)
- 5.A2.3 identify benefits associated with developing and maintaining each of components of health-related fitness (e.g., increased cardiorespiratory endurance provides more stamina for prolonged activity, increased muscular strength and muscular endurance improve performance in activities, good flexibility allows for ease of movement during activities)
- 5.A2.4 assess a specific component of their health-related fitness by noting physical responses during various physical activities, and monitor changes over time
- 5.A2.5 develop and implement personal plans relating to a specific component of health-related fitness, chosen on the basis of their personal fitness assessments and interests

A3.Active Living Standard: demonstrate responsibility for their own safety and the safety of others as they participate in physical activities.

- 5.A3.1 demonstrate behaviours and apply procedures that maximize their safety and that of others during physical activity (e.g.,demonstrating personal responsibility for safety, using proper stretching techniques during cool-down activities, ensuring their actions promote a positive emotional experience for themselves and others, reporting any equipment that is not in good working condition)
- 5.A3.2 demonstrate an understanding of proactive measures that should be taken to minimize environmental health risks that may interfere with their safe participation in and enjoyment of outdoor physical activities (e.g., drinking fluids to avoid dehydration, before, during, and after vigorous activities; applying sunscreen and wearing a hat and sunglasses to protect the skin and eyes from sun damage; checking weather reports for the humidex, wind chill, air quality index, and UV index to determine what preparations may be needed to be safe and comfortable outdoors; reading warning signs posted in recreational areas)

Standard B: Performance, Competence: Skills, Concepts and Strategies

B1.Performance, Competence: Skills, Concepts and Strategies Standard: perform movement skills, demonstrating awareness of the basic requirements of the skills and applying movement concepts as appropriate, as they engage in a variety of physical activities

- 5.B1.1 perform controlled transfers of weight in a variety of situations involving static and dynamic balance, using changes in speed and levels, with and without equipment (e.g., perform a sequence of movements on a floor line or a bench; stay in control while rolling, balancing, twisting, dodging, jumping, skipping quickly and slowly)
- 5.B1.2 demonstrate the ability to jump in control for height or distance, using a variety of body actions (e.g., push off strongly during take-off when jumping for height; keep a tight body

-
- position when turning in the air; land smoothly and safely after a vertical jump and half turn in a dance sequence; maintain body control when landing after a long jump)
 - 5.B1.3 explore different combinations of locomotor movements with and without equipment, alone and with others, moving at different speeds and levels, and using different pathways (e.g., dodge or change speed or direction to avoid people or objects; incorporate different movements at varying speeds when creating a dance with a partner; use ribbons or balls to develop a movement sequence that includes jumps, turns, movements in different directions, and balances)
 - 5.B1.4 send and receive objects using different body parts and equipment, adjusting for speed, while applying basic principles of movement (e.g., kick a ball with the inside of their dominant foot at varying speeds to a partner who absorbs the ball with his/her body when it is received; strike a beach ball with a hand paddle and follow through in the direction of the intended target; experiment with using different amounts of force to send at different speeds)
 - 5.B1.5 retain objects with and without equipment in a variety of situations while moving in different pathways around others and equipment (e.g., dribble a ball around pylons, slowing down as needed to maintain control; stickhandle a felt disc towards a goal or target while shifting the direction of forward movement to avoid defenders or obstacles; catch and carry a ball in a scoop)

B2. Performance, Competence: Skills, Concepts and Strategies Standard: apply movement strategies appropriately, demonstrating an understanding of the components of a variety of physical activities, in order to enhance their ability to participate successfully in those activities.

- 5.B2.1 demonstrate an understanding of the components of physical activities (e.g., movement skills, game structures, rules and guidelines, conventions of fair play and etiquette)
- 5.B2.2 apply this understanding of the different components as they participate in a variety of physical activities (e.g., lead-up games such as three-on-three lacrosse, mini tennis, and keep-it-up; recreational activities such as disc golf, parachute activities, orienteering, and cooperative games; fitness activities such as yoga, isometric muscle-building activities, and endurance activities; dance activities such as creative movement, hip hop-type moves, and novelty dances)
- 5.B2.3 describe common features of specific categories of physical activities (e.g., individual, target, net/wall, striking/fielding, territory)
- 5.B2.4 describe strategies that they found effective while participating in a variety of physical activities in different categories
- 5.B2.5 apply a variety of tactical solutions to increase their chances of success as they participate in physical activities (e.g., individual activities: interpret feedback from a partner and adjust their position in a yoga activity; target activities: choose an appropriate distance from the target to maximize level of challenge and opportunity for success; work on accuracy by maintaining eye contact with the target and following through in the direction of the target; net/wall activities: place shots away from their opponent; striking/ fielding activities: choose their position to effectively cover a space when fielding; territory activities: make quick passes to keep the object moving when playing a modified team handball game)

Standard C: Healthy Living

C2. Healthy Living Standard: - demonstrate the ability to apply health knowledge and living skills to make reasoned decisions and take appropriate actions relating to their personal health and well-being;

- 5.C2.1 demonstrate the ability to deal with threatening situations by applying appropriate living skills (e.g., personal skills, including self-monitoring and anger management; interpersonal skills, including conflict resolution skills; communication skills, including assertiveness and refusal skills) and safety strategies (e.g., having a plan and thinking before acting; looking confident; being aware of their surroundings and of people's body language, tone of voice, or facial expressions; seeking help; drawing on cultural teachings, where appropriate, to analyse situations and develop responses)

Standard D: Living Skills

D1. Living Skills - Personal Skills Standard: demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in connection with the expectations in the Active Living, Performance Competence, and Healthy Living strands for this grade.

- 5.D1.1 use self-awareness and self-monitoring skills to help them understand their strengths and needs
- 5.D1.2 take responsibility for their actions
- 5.D1.3 recognize and describe sources of stress
- 5.D1.4 monitor their own progress as they participate and develop in physical activities and movement competence (e.g., Active Living: monitor progress towards fitness goals, noting improvements or lack of improvement and making changes as needed; note how physical activity makes them feel, particularly when they are experiencing stress; Movement Competence: describe how knowing their strengths and areas for improvement can help when they are learning new skills; Healthy Living: describe some of the factors or situations that cause them to experience stress)
- 5.D1.4 use adaptive, management, and coping skills to help them respond to the various challenges they encounter as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living (e.g., Active Living: demonstrate a positive attitude, persistence, and a willingness to seek support when working at developing fitness, and explain how these factors help them meet their goals; Performance Competence: try different approaches, such as adjusting body position or speed, to help maintain control of a ball with their feet while running down the field; Healthy Living: identify how to get help in different situations –when feeling really sad or worried, in emergencies, when confronted with violence, when being bullied or witnessing someone else being bullied, to prevent injury)

D2. Living Skills - Interpersonal Skills Standard: demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in connection with the expectations in the Active Living, Performance Competence, and Healthy Living strands for this grade.

- 5.D2.1. communicate effectively, using verbal or non-verbal means, as appropriate, and interpret information accurately as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living (e.g., Active Living: warn others and report to the teacher if any equipment is broken or unsafe to use; Movement Competence: when working with a partner to create a developmental gymnastics sequence,

listen to their partner and share ideas for ways to improve the sequence; Healthy Living: practise using refusal skills if presented with choices or peer pressure regarding use of alcohol or tobacco)

- 5.D2.2. apply relationship and social skills as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living to help them interact positively with others, build healthy relationships, and become effective team members (e.g., Active Living: demonstrate leadership skills by taking turns leading warm-up activities; Performance Competence: collaborate with teammates to plan how to move the ball up the field, then follow through with the plan; Healthy Living: show respect for others by giving classmates encouragement and praise and by avoiding behaviours such as calling people names or excluding them; show respect for cultural and all other forms of diversity)

D3.Living Skills - Critical and Creative Thinking Standard: demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in connection with the expectations in the Active Living, Performance Competence, and Healthy Living strands for this grade.

- 5.D3.1 use a range of critical and creative thinking skills and processes to assist them in making connections, planning and setting goals, analysing and solving problems, making decisions, and evaluating their choices in connection with learning in health and physical education (e.g., Active Living: make connections between being active and working towards personal fitness goals; Performance Competence: explain the idea of “healthy competition”, what it involves and what it should not involve, and how the presence or absence of those features might affect participation in physical activity; explore how using different speeds and pathways can enhance a dance sequence; Healthy Living: describe how the media can influence their food choices)

Grade 6

Standard A: Active Living

A1.Active Living Standard - participate actively and regularly in a wide variety of physical activities, and demonstrate an understanding of factors that encourage lifelong participation in physical activity

- 6.A1.1 actively participate in a wide variety of activities, according to abilities (e.g., lead-up games, recreational activities, fitness activities, dance)
- 6.A1.2 apply behaviors that enhance ability to take part. (e.g., being engaged and moving throughout the activity, using time effectively, being open to new activities, displaying fair play by taking turns and sharing, listening to others, not blaming or taking advantage of others)
- 6.A1.3 demonstrate an understanding of factors that contribute to their personal enjoyment of being active, (e.g., having the opportunity to participate in activities in various sizes of groups and using various types of equipment, having a choice of activities, being able to take part in activities that are modified to suit their individual needs, being able to participate actively in a game or activity rather than having to sit it out, having a chance to take part in both team games and individual activities, experiencing pleasure in both the physical experiences and the aesthetic aspects of movement), as they participate in a wide variety of individual and small-group activities and lead-up games.
- 6.A1.4 describe factors that motivate them to participate in physical activity every day, at school and during leisure time, and that influence their choice of activities. (e.g., influence of

friends, enthusiasm for the outdoors, a preference for either team or individual activities, encouragement from others, increased time with friends, availability and affordability of a program, enjoyment of healthy competition, influence of media role models)

A2.Active Living Standard: demonstrate an understanding of the importance of being physically active and apply physical fitness concepts and practices that contribute to healthy, active living

- 6.A2.1 participate regularly in sustained moderate to vigorous physical activity, to the best of their ability
- 6.A2.2 explain how participation in physical activities affects personal health-related fitness (e.g., muscular strength and endurance activities help tone and strengthen muscles, flexibility activities can help prevent injuries, cardiorespiratory activities can improve the immune system)
- 6.A2.3 collect baseline-data for performance/ fitness (eg: success rates, performance based on rubrics, heart rate etc) and use it to set SMART goals and monitor changes in performance over a period of time
- 6.A2.4 develop and implement plans of action designed to improve fitness outcomes for self and others based on both health-related fitness knowledge (eg: Health-related components of fitness, particularly CV and Muscular endurance and methods of training, particularly Circuit, interval and continuous) and their interests (e.g.,creating a workout for a specific audience)

A3.Active Living Standard: demonstrate responsibility for their own safety and the safety of others as they participate in physical activities.

- 6.A3.1 demonstrate behaviours and apply procedures that maximize their safety and that of others during physical activity (e.g., demonstrating personal responsibility; checking that equipment is in good working order; wearing an appropriate and properly fitting helmet when taking part in activities such as bike riding, rafting; operating safely as part of a 3-person climbing team; helping someone adjust the straps on his or her wheelchair)

Standard B: Performance Competence: Skills, Concepts, and Strategies

B1.Performance Competence - Skills, Concepts, and Strategies Standard: perform movement skills, demonstrating awareness of the basic requirements of the skills and applying movement concepts as appropriate, as they engage in a variety of physical activities

- 6.B1.1 perform smooth transfers of weight in relation to others and equipment in a variety of situations involving static and dynamic balance (e.g., shift weight smoothly during hip hop dancing; perform twists and balances on a stability ball; with a partner, use resistance [pushing] and counter-tension [pulling] by shifting and adjusting their weight and position to create a stable partner balance; move smoothly from a downward dog pose in yoga to a standing pose)
- 6.B1.2 perform a wide variety of locomotor movements, using a variety of speeds, directions, and pathways and in combinations, while moving around others and/or equipment (e.g., wheel their wheelchair around objects and at different speeds in a fitness circuit; create a developmental gymnastics sequence with a partner that uses a range of movements and shows changes in speed, level, and formation)
- 6.B1.3 send and receive a variety of objects, adjusting for speed and distance, while applying basic principles of movement (e.g., use different amounts of force to send an object to a teammate, depending on relative positions and type of object being thrown, batted, or kicked;

send an object through a hoop, into a bucket, to a target on a wall, to a specific spot on the other side of a net, to a partner; bend knees, keeping arms out and head up in a ready position to prepare to receive an object; use the body to absorb an object that is sent with greater force; follow through in the direction of the target to improve aim and accuracy)

- 6.B1.4 retain objects in a variety of situations while traveling in different pathways and at different speeds in relation to others and equipment (e.g., run to catch a football, then carry it in a “down and out” pattern that first goes down the field, then turns abruptly right or left; stickhandle a felt disc slowly and then quickly while keeping their head up)

B2.Performance Competence - Skills, Concepts, and Strategies Standard: apply movement strategies appropriately, demonstrating an understanding of the components of a variety of physical activities, in order to enhance their ability to participate successfully in those activities.

- 6.B2.1 demonstrate an understanding of the basic components of physical activities, (e.g., movement skills, game structures, basic rules and guidelines, conventions of fair play and etiquette), and apply this understanding as they participate in a variety of physical activities (e.g., lead-up games such as four-on-four rubber-chicken keep-away, basketball shooting games, and two-base softball; recreational activities such as mini-triathlons, hiking, skipping rope, and cooperative games; fitness activities such as t'ai chi, activities with exercise bands and exercise balls, and personal fitness challenges; dance activities such as cultural dance, creative movement, and jazz steps)
- 6.B2.2 describe common features of specific categories of physical activities (e.g., individual, target, net/wall, striking/fielding, territory/ invasion games), and describe/ reflect on strategies that they found effective while participating.
- 6.B2.3 apply tactical solutions to increase opportunities for success through participation (e.g., individual activities: find a comfortable pace when running, wheeling a wheelchair, or speed-walking; work with a partner to develop different ways of using an exercise ball to improve core strength; target activities: in a game like bocce, hit opponents' balls out of the way in order to make space for their own ball closer to the target; net/wall activities: assume a position of readiness to move to receive an object; practise sending the ball to specific parts of the opposite court; striking/fielding activities: throw the ball promptly to teammates after retrieving it to stop opponents from scoring; territory activities: defend territory by anticipating an opponent's actions; bounce a utility ball at different heights to keep it from an opponent in a keep-away game; throw a disc to a stationary partner, then move down the field to receive a return pass)

Standard C: Healthy Living

C1.Healthy Living Standard: demonstrate an understanding of factors that contribute to healthy development

- 6.C1.1.Substance Use, Addiction, and Related Behaviours: describe the range of effects associated with using cannabis and other illicit drugs (e.g., crack, cocaine, Ecstasy, crystal methamphetamine) and intoxicating substances (e.g., gas, glue, prescription medications)
- 6.C1.2.Substance Use, Addiction, and Related Behaviours: identify people and community resources (e.g., elders, family members, community agencies, churches, mosques, synagogues, public health units, telephone help lines, recreation facilities) that can provide support when dealing with health-related choices or situations.

- 6.C1.3.Sexuality Education: identify factors that affect the development of a person’s self-concept (e.g., environment, evaluations by others who are important to them, stereotypes, awareness of strengths and needs, social competencies, cultural and gender identity, support, body image, mental health and emotional well-being, physical abilities)
- 6.C1.4.Sexuality Education: compare methods of self-care during menstrual cycles (eg: sanitary items, pads, tampons, cups, regular washing, risks of douching etc.)
- 6.C1.5.Sexuality Education: describe how male and female genitals change during adolescence (eg: changes in size, appearance, function, etc) and how reproductive organs function for conception and pregnancy (eg: menstrual cycle, fertilization, ejaculation, embryonic development and birth.)

C2.Healthy Living Standard - demonstrate the ability to apply health knowledge and living skills to make reasoned decisions and take appropriate actions relating to their personal health and well-being;

- 6.C2.1.Healthy Eating: apply a holistic model of health to recognise influences (media, cultural, peer, environmental impacts, family etc) on health choices (including nutrition, sexuality, health and safety), using this to develop personal guidelines for healthier living.
- 6.C2.2.Health Eating: apply their recognition of internal hunger and thirst cues and their knowledge of physical factors that influence the desire to eat and drink (e.g., stage of development, growth spurts, level of physical activity, eating larger portions) to develop personal guidelines for healthier eating
- 6.C2.3. Personal Safety and Injury Prevention: apply personal skills and interpersonal skills (e.g., self-awareness and self-management skills, including anger management; communication skills, including listening skills and assertiveness skills) to promote positive interaction and avoid or manage conflict in social situations (e.g., class-room groups, groups of friends, sports teams, school clubs)
- 6.C2.4.Substance Abuse, Addictions and Related Behaviours: use decision-making strategies and skills and an understanding of factors influencing drug use (e.g., personal values, peer pressure, media influences, curiosity, legal restrictions, cultural teachings) to make safe personal choices about the use of drugs such as alcohol, tobacco, and cannabis
- 6.C2.5.Sexuality Education: describe how they can build confidence and lay a foundation for healthy relationships by acquiring a clearer understanding of the physical, social, and emotional changes that occur during adolescence (e.g., physical: voice changes, skin changes, body growth; social: changing social relationships, increasing influence of peers; emotional: increased intensity of feelings, new interest in relationships with boys or girls, confusion and questions about changes)
- 6.C2.6. Sexuality Education: make informed decisions that demonstrate respect for themselves and others and help to build healthier relationships, using a variety of living skills (e.g., personal and interpersonal skills; critical and creative thinking skills; skills based on global/ cultural understandings or cultural teachings).

C3.Healthy Living Standard: demonstrate the ability to make connections that relate to health and well-being – how choices and behaviours affect both ourselves and others, and how factors in the world around us affect our own and others’ health and well-being.

- 6.C3.1. Healthy Eating: explain how healthy eating and active living work together to improve a person’s general health and well-being (e.g., both provide more energy and contribute to improved self-concept, greater resistance to disease, and better overall health; both help a

person to maintain a weight that is healthy for them) and how the benefits of both can be promoted to others

- 6.C3.2. Personal Safety and Injury Prevention: recognize the responsibilities and risks associated with caring for themselves and others (e.g., while babysitting, staying home alone, caring for pets, volunteering in the community, assisting someone with a disability, preparing meals, traveling to and from school and other locations), and demonstrate an understanding of related safety practices and appropriate procedures for responding to dangerous situations (e.g., safe practices for preparing food; responses to allergic reactions, fire, sports injuries, dental emergencies, hypothermia, bullying)
- 7.C3.3. Sexuality Education: explain how relationships with others (e.g., family, peers) and sexual health may be affected by the physical and emotional changes associated with puberty (e.g., effect of physical maturation and emotional changes on family relationships, interest in intimate relationships and effect on peer relationships, risk of STIs and/or pregnancy with sexual contact)

Standard D: Living Skills

D1. Living Skills Standard - Personal Skills: demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in connection with the expectations in the Active Living, Performance Competence, and Healthy Living strands for this grade.

- 6.D1.1 use self-awareness and self-monitoring skills to understand one's strengths and needs
- 6.D1.2 take responsibility for own actions
- 6.D1.3 recognize sources of stress
- 6.D1.4 monitor own progress, when participating in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living (e.g., Active Living: identify which of the factors known to motivate participation in physical activity in most people are the strongest factors affecting their own motivation to be active; Performance Competence: assess their technique for catching throws of different speeds – are they remembering to move farther away when a ball is thrown hard and fast?; Healthy Living: reflect on how their body image affects their self-concept, and identify other factors, including acceptance by others, that influence their sense of themselves)
- 6.D1.5 use adaptive, management, and coping skills to help them respond to the various challenges they encounter as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living (e.g., Active Living: explain why properly fitted helmets and well-secured straps on wheelchairs allow them to participate in physical activities with greater confidence; Movement Competence: explain how adopting a positive attitude and a willingness to try new things helped them have more fun and make progress in learning a new skill or game; Healthy Living: describe how their management and organizational skills are applied when they are preparing to babysit a younger child)

D2. Living Skills Standard - Interpersonal Skills: demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in connection with the expectations in the Active Living, Performance Competence, and Healthy Living strands for this grade.

-
- 6.D2.1 communicate effectively, using verbal or non-verbal means, as appropriate, and interpret information accurately as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living (e.g., Active Living: use encouraging words to support other students when being active; Movement Competence: communicate clearly when working together in small groups to create a movement sequence; Healthy Living: describe what verbal and non-verbal signals could be used to send messages to others about how you feel about them)
 - 6.D2.2 apply relationship and social skills as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living to help them interact positively with others, build healthy relationships, and become effective team members (e.g., Active Living: promote fair play, share equipment, take turns, and follow rules when playing lead-up games; show respect for the decisions and calls of teammates when refereeing their own activities; Performance Competence: contribute ideas when working in a group to accomplish a collaborative task; Healthy Living: show awareness of how best to help others by asking questions and responding as directed by the person)

D2.Living Skills Standard - Critical and Creative Thinking Skills: demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in connection with the expectations in the Active Living, Performance Competence, and Healthy Living strands for this grade.

- 6.D3.1 use a range of critical and creative thinking skills and processes to assist them in making connections, planning and setting goals, analysing and solving problems, making decisions, and evaluating their choices in connection with learning in health and physical education (e.g., Active Living: describe the steps that should be taken when responding to minor injuries; Performance Competence: plan a variety of offensive and defensive tactics that could be used in different situations in striking/fielding games; Healthy Living: describe what can be done to challenge stereotypes and assumptions, and to encourage respect for and acceptance of differences and inclusion of all people in social activities)

Grade 7

Standard A: Active Living

A1.Active Living Standard: participate actively and regularly in a wide variety of physical activities, and demonstrate an understanding of factors that encourage lifelong participation in physical activity

- 7.A1.1 actively participate wide variety of program activities, according to their capabilities (e.g individual activities, small- and large-group activities, movement and rhythmic activities, dance, out-door pursuits),
- 7.A1.2 apply behaviors that enhance their readiness and ability to take part in all aspects of the program (e.g., striving to do their best, displaying good sports etiquette along with healthy competition) in all aspects of the program
- 7.A1.3 demonstrate an understanding of factors that contribute to their personal enjoyment of being active (e.g., being able to modify games for different purposes; being able to take part in activities that suit their individual abilities and interests; being exposed to a variety

of activities, including recreational, team, individual, body management, and dance and fitness activities; feeling comfortable about the activities; being able to take part in activities that are culturally relevant), as they participate in a diverse range of physical activities in a variety of indoor and outdoor environments

- 7.A1.4 demonstrate an understanding of the factors that motivate or impede participation in physical activity everyday. (e.g., peer influence, sense of belonging, self-confidence, availability and cost of resources and opportunities, influence of role models, compatibility or conflict with family responsibilities)

A2.Active Living Standard: demonstrate an understanding of the importance of being physically active and apply physical fitness concepts and practices that contribute to healthy, active living

- 7.A2.1 participate regularly in sustained moderate to vigorous physical activity, to the best of their ability
- 7.A2.2 identify factors that can affect health-related fitness, (e.g., heredity, nutrition, developmental stage, environmental factors, social and emotional factors, mental health, cultural teachings), and describe how training principles (e.g., frequency, intensity, duration, type of activity) can be applied to develop fitness.
- 7.A2.3 assess their level of health-related fitness (i.e., cardiorespiratory endurance, muscular strength, muscular endurance, flexibility) during various physical activities and monitor changes in fitness levels over time (e.g., by tracking heart rates, recovery time, changes in how one feels during and after activity; by comparing activity participation and changes in fitness levels)
- 7.A2.4 develop, implement, and revise a personal plan to meet short-term, health-related fitness goals (e.g., by using personal assessment information to set realistic short-term goals, using appropriate training principles, identifying possible challenges, identifying sources of support, determining what will indicate when goals have been reached, monitoring progress and comparing achievements to planned goals, acknowledging successes, changing goals or approaches as needed)

A3.Active Living Standard: demonstrate responsibility for their own safety and the safety of others as they participate in physical activities.

- 7.A3.1 demonstrate behaviours and apply procedures that maximize their safety and that of others (e.g., following appropriate procedures and guidelines, demonstrating social responsibility, checking that they have their puffers and/or epinephrine auto-injectors, checking for hazards such as pencils or other objects on the floor or potholes on the field before beginning activities, using mouth guards when necessary during recreational activities in the community, avoiding pressuring a peer to participate in unsafe activities, being respectful of others who may be hesitant to try new skills) in a variety of physical activity settings (e.g., school, community recreational facilities, outdoor recreational venues)
- 7.A3.2 demonstrate an understanding of procedures for anticipating and responding to hazards that may lead to injury or ailments while participating in physical activity outdoors (e.g., be aware of common hazards that could be encountered and take appropriate precautions; apply systems thinking to risk assessment by making connections between possible hazards and their outcomes; recognize unexpected hazards, assess the risk, and control the hazard by telling someone about it, removing it, or removing themselves from the danger)

Standard B: Performance Competence: Skills, Concepts and Strategies

B1.Performance Competence- Skills, Concepts and Strategies Standard: perform movement skills, demonstrating awareness of the basic requirements of the skills and applying movement concepts as appropriate, as they engage in a variety of physical activities

- 7.B1.1 perform smooth transfers of weight and rotations, in relation to others and equipment, in a variety of situations involving static and dynamic balance (e.g., perform a rhythmic gymnastic sequence such as throwing a ball, performing a shoulder roll, and catching the ball; demonstrate a dance sequence with a partner, including a series of steps, jumps, turns, and balances; perform a smooth high jump approach, take-

off, and landing; use a low stance for balance during a pivot turn; move smoothly between positions in a yoga sequence)

- 7.B1.2 perform a wide variety of locomotor movements, with and without equipment, while responding to a variety of external stimuli (e.g., dodge and fake in response to others, accelerate before taking off for a high jump or a running long jump, respond to changes in music during creative dance by changing arm movements, lift feet and show awareness of trail conditions and obstacles when running cross-country on trails)
- 7.B1.3. send, receive, and retain a variety of objects, while taking into account their position and motion in relation to others, equipment, and boundaries, while applying basic principles of movement (e.g., use different strokes and varying degrees of force, depending on their opponent's position on the court, to return the shuttle in badminton; assume a ready position to prepare to receive a short pass; strike a ball by shifting their weight as they contact the ball and following through in the intended direction to send it between or over opposing players; cradle or control the ball on the side of the body that is away from opponents when moving up the field)
- 7.B1.4 demonstrate an understanding of the phases of movement (i.e., preparation, execution, follow-through), and apply this understanding to the refinement of movement skills as they participate in a variety of physical activities (e.g., jumping during a dance routine: bend knees to get ready to jump, thrust arms up for extra force while jumping, hold a controlled body position in flight, bend knees and put arms out for a stable landing)

B2. Performance Competence- Skills, Concepts and Strategies Standard: apply movement strategies appropriately, demonstrating an understanding of the components of a variety of physical activities, in order to enhance their ability to participate successfully in those activities.

- 7.B2.1 demonstrate an understanding of the components of a range of physical activities (e.g., movement skills, game structures, basic rules and guidelines, conventions of fair play and etiquette), and apply this understanding as they participate in a variety of physical activities in indoor and outdoor environments
- 7.B2.2 describe and compare different categories of physical activities (e.g., individual, target, net/ wall, striking/fielding, territory), and describe strategies/tactics that they found effective while participating in these different categories.
- 7.B2.3 apply a variety of tactical solutions to increase chances of success as they participate in physical activities (e.g., individual activities: practise a dance or gymnastics sequence in parts to refine each move, then put it back together in a sequence; target activities: adjust force when sending the object so that it will stop or land in a position to block the opponent; net/wall activities: work with teammates to cover space effectively; striking/fielding activities: hit or kick in different ways, varying the distance the object is sent, so that it will be more difficult for opponents to field and return the object; territory activities: use a “give and go” by sending the object to a teammate (give) then running to an open space to receive the object back again from the teammate (go); kick a leading pass to a moving teammate to maintain possession).

Standard C: Healthy Living

C1. Healthy Living Standard: demonstrate an understanding of factors that contribute to healthy development

- 7.C1.1. Personal Safety and Injury Prevention: describe benefits and dangers, for themselves and others, that are associated with the use of computers and other technologies (e.g., benefits: saving time; increased access to information; improved communication, including global access; dangers: misuse of private information; identity theft; cyberstalking; hearing damage and/or traffic injuries from earphone use; financial losses from online gambling; potential for addiction), and identify protective responses
- 7.C1.2. Substance Use, Addiction, and Related Behaviours: demonstrate an understanding of linkages between mental health problems and problematic substance use, and identify school and community resources (e.g., trusted adults at school, guidance counsellors, public health services, community elders, help lines) that can provide support for mental health concerns relating to substance use, addictions, and related behaviours

- 7.C1.3.Sexuality Education: explain the importance of having a shared understanding with a partner about the following: delaying sexual activity until they are older and the reasons for this; (e.g., choosing to abstain from any genital contact; choosing to abstain from having vaginal or anal intercourse; choosing to abstain from having oral-genital contact);
- 7.C1.4.Sexuality Education: the concept of consent and how consent is communicated; and, in general, the need to communicate clearly with each other when making decisions about sexual activity in the relationship

C2. Healthy Living Standard: demonstrate the ability to apply health knowledge and living skills to make reasoned decisions and take appropriate actions relating to their personal health and well-being;

- 7.C2.1. Healthy Eating: demonstrate the ability to make healthier food choices, using information about the role that different foods play as contributing or preventive factors in a variety of health disorders (e.g., cancer, Type 2 diabetes, cardiovascular disease, obesity, food allergies and anaphylaxis, tooth decay, osteoporosis)
- 7.C2.2. Sexuality Education: assess the impact of different types of bullying or harassment, including the harassment and coercion that can occur with behaviours such as sexting, on themselves and others, and identify ways of preventing or resolving such incidents (e.g., communicating feelings; reporting incidents involving themselves or others; encouraging others to understand the social responsibility to report incidents and support others rather than maintaining a code of silence or viewing reporting as “ratting”; seeking help from support services; learning skills for emotional regulation; using strategies for defusing tense or potentially violent situations)
- 7.C2.3. Substance Abuse, Addictions and Related Behaviours: explain how preoccupation with body image or athletic performance can contribute to substance abuse (e.g., misuse of supplements, vitamins, diuretics, diet pills, laxatives, steroids, or performance-enhancing drugs), and demonstrate the ability to make informed choices about caring for their bodies

C3. Healthy Living Standard: demonstrate the ability to make connections that relate to health and well-being – how their choices and behaviours affect both themselves and others, and how factors in the world around them affect their own and others’ health and well-being.

- 7.C3.1. Healthy Eating: demonstrate an understanding of personal and external factors that affect people’s food choices and eating routines (e.g., personal: likes and dislikes, busy schedules, food allergies or sensitivities, personal values, cultural practices or teachings; external: family budget, cost of foods, type of food available at home, at school, or in the community), and identify ways of encouraging healthier eating practices
- 7.C3.2. Substance Abuse, Addictions and Related Behaviours: analyse the personal and societal implications of issues related to substance use and addictive behaviours (e.g., effect of technology dependence on school and workplace performance, personal relationships, and physical health; risks associated with chewing tobacco; effects of second-hand smoke on non-smokers and children; legal and health implications of underage drinking; body damage and reputation loss among athletes as a result of the use of steroids and other performance-enhancing drugs; risk of HIV/AIDS with intravenous drug use; risk of fetal alcohol spectrum disorder [FASD] as a result of alcohol abuse during pregnancy)
- 7.C3.3. Sexuality Education: assess the effects of stereotypes, including homophobia and assumptions regarding gender roles and expectations, sexual orientation, gender expression, race, ethnicity or culture, mental health, and abilities, on an individual’s self-concept, social inclusion, and relationships with others, and propose appropriate ways of responding to and changing assumptions and stereotypes.
- 7.C3.4. Sexuality Education: learn the definition of body image towards self and others. Learn to differentiate between positive and negative body image and develop a positive body image towards self and others.

Standard D: Living Skills

D1. Living Skills Standard - Personal Skills: demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in connection with the expectations in the Active Living, Movement Competence, and Healthy Living strands for this grade.

- 7.D1.1 use self-awareness and self-monitoring skills to help them understand their strengths and needs,

- 7.D1.2 take responsibility for their actions,
- 7.D1.3 recognize sources of stress,
- 7.D1.4 monitor their own progress, as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living (e.g., Active Living: describe the role models that may have influenced some of their choices with respect to physical activity; consider what effect their family and their cultural background have had on the way they think about participation in physical activity or on the activities they choose; Movement Competence: take responsibility for improving a skill by breaking it down, getting feedback on the way they perform each part, and working on parts that need improvement; Healthy Living: describe ways in which they can monitor and stay aware of their own physical, emotional, and psychological health)
- 7.D1.5 use adaptive, management, and coping skills to help them respond to the various challenges they encounter as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living (e.g., Active Living: use organizational and time-management skills to find a balance when planning time to be active every day, to complete homework, and to spend time with family and friends; Movement Competence: demonstrate how to refine movements by adjusting body position during the preparation, execution, and follow-through stages of an action; Healthy Living: describe how to access different sources of support when dealing with issues connected to substance use or mental health)

D2.Living Skills Standard - Interpersonal Skills: demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in connection with the expectations in the Active Living, Movement Competence, and Healthy Living strands for this grade.

- 7.D2.1 communicate effectively, using verbal or non-verbal means, as appropriate, and interpret information accurately as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living (e.g., Active Living: clearly communicate refusal to participate in activities that are unsafe, particularly when peer pressure is involved; Movement Competence: show readiness to receive a pass in a game by moving into position, making eye contact, and holding a hand out to act as a target; when the other team scores in a game of hand-ball, say something supportive, such as “Good try”, to the goalie; Healthy Living: practise effective responses to someone who directs a homophobic or racial slur to them or to another student)
- 7.D2.2 apply relationship and social skills as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living to help them interact positively with others, build healthy relationships, and become effective team members (e.g., Active Living: make adjustments to activities that will allow all group members to be included and to enjoy participating; Movement Competence: work cooperatively with a partner when hitting a badminton shuttle back and forth; Healthy Living: explain how appreciating differences can contribute to positive relationship building)

D3.Living Skills Standard - Critical and Creative Thinking Skills: demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in connection with the expectations in the Active Living, Movement Competence, and Healthy Living strands for this grade.

- 7.D3.1 use a range of critical and creative thinking skills and processes to assist them in making connections, planning and setting goals, analysing and solving problems, making decisions, and evaluating their choices in connection with learning in health and physical education (e.g., Active Living: describe how they can use health-related fitness-assessment information when making action plans for personal fitness; Movement Competence: devise and experiment with different tactical solutions for better results in particular sports and other physical activities; Healthy Living: explain the connections between body image, mental health, and the risk of substance abuse; explain the importance of understanding connections between food choices and chronic diseases)

Grade 8

Standard A: Active Living

A1.Active Living Standard: - participate actively and regularly in a wide variety of physical activities, and demonstrate an understanding of how personal motivation factors can be used to encourage participation in physical activity.

- 8.A1.1 actively participate in a wide variety of activities, according to abilities (e.g individual activities, small- and large-group activities, movement and rhythmic activities, dance, out-door pursuits)
- 8.A1.2 demonstrate an understanding of factors that contribute to their personal enjoyment of being active (e.g., being able to adapt activities to suit individual needs and preferences; having a choice of activities and choices within activities; being comfortable with the activities, both socially and emotionally; being able to take part in activities in a natural environment; being able to take part in activities that are culturally relevant), as they participate in a diverse range of physical activities in a variety of indoor and outdoor environments
- 8.A1.3 demonstrate an understanding of factors that motivate personal participation in physical activities every day (e.g., gaining health benefits, including release from stress; having interpersonal interactions; becoming more independent in daily living activities; experiencing personal enjoyment), and explain how these factors can be used to influence others (e.g., friends, family, members of the community) to be physically active

A2.Active Living Standard: demonstrate an understanding of the importance of being physically active and apply physical fitness concepts and practices that contribute to healthy, active living

- 8.A2.1. participate regularly in sustained moderate to vigorous physical activity, to the best of their ability
- 8.A2.2 recognize the difference between health-related components of personal fitness (i.e., cardio-respiratory endurance, muscular strength, muscular endurance, flexibility) and skill-related components (i.e., balance, agility, power, reaction time, speed, and coordination), and explain how to use training principles and training methods to enhance both components
- 8.A2.3 assess their level of health-related fitness (i.e., cardiorespiratory endurance, muscular strength, muscular endurance, flexibility) during various physical activities and monitor changes in fitness levels over time (e.g., by tracking heart rates, recovery time, how they feel during and after activity, level of participation; noting increase in range of motion when doing yoga stretches; tracking increases in the number of repetitions when doing arm curls with exercise bands)
- 8.A2.4 develop, implement, and revise a personal plan to meet short- and long-term health-related fitness and physical activity goals.

A3.Active Living Standard: demonstrate responsibility for their own safety and the safety of others as they participate in physical activities.

- 8.A3.1 demonstrate behaviours and apply procedures that maximize their safety and that of others (e.g., following appropriate procedures and guidelines; demonstrating social responsibility; encouraging others to act safely; wearing sunscreen, long sleeves, sunglasses, and a hat to limit UV exposure) in a variety of physical activity settings (e.g., school, community recreational facilities, outdoor recreational venues)
- 8.A3.2 demonstrate a basic understanding of how to deal with emergency situations that may occur while participating in physical activity (e.g., remain calm, know when more help is needed or when to call 9-1-1, know where to get more help, know how to recognize symptoms of asthma or anaphylaxis, move objects that may be a safety hazard away from the injured person, know what an automated external defibrillator (AED) is and be aware of where they are located in community facilities)

Standard B: Performance Competence: Skills, Concepts and Strategies

B1.Performance Competence - Skills, Concepts and Strategies Standard: perform movement skills, demonstrating awareness of the basic requirements of the skills and applying movement concepts as appropriate, as they engage in a variety of physical activities

- 8.B1.1 perform smooth transfers of weight and rotations, in relation to others and equipment, in a variety of situations involving static and dynamic balance (e.g., display control while stepping and turning on and off

-
- steps during an aerobic routine; move smoothly between positions and twists during a Pilates activity; work with a partner to create a sequence that involves holding a partner's partial or whole weight when transferring from one balance to another)
- 8.B1.2 perform a wide variety of locomotor movements, with and without equipment, while responding to a variety of external stimuli (e.g., approach, take off, and land when doing a triple jump into a pit; strive to beat a time record in orienteering; choreograph a dance sequence in response to music; perform step aerobics at different tempos; change styles of cross-country skiing depending on snow and terrain conditions, using a skate technique on open, flat sections and a classic technique on narrower trails)
 - 8.B1.3 use and combine sending, receiving, and retaining skills in response to a variety of external stimuli, while applying basic principles of movement (e.g., shift weight and use all joints for maximum force when throwing against the wind; put an appropriate spin on the ball when throwing a football or rolling a ball around an obstacle in front of a target; sprint to catch a pass that has been thrown short to an open space away from defenders; while moving to music, transfer a rhythmic gymnastics ball from one hand to the other, using the momentum of the movement to hold on to the ball; show awareness of others' positions when taking off and landing in a basketball layup; move body to retain an object in flag tag while evading defenders; keep the basketball on their lap while moving and evading a defender in wheelchair basketball)
 - 8.B1.4 demonstrate an understanding of the phases of movement (i.e., preparation, execution, follow-through) and apply this understanding to the refinement of movement skills in a variety of physical activities (e.g., assume a ready position, swing, and follow through in a badminton stroke; reach, pull, and recover when doing the back crawl)

B2: Performance Competence - Skills, Concepts and Strategies Standard: apply movement strategies appropriately, demonstrating an understanding of the components of a variety of physical activities, in order to enhance their ability to participate successfully in those activities.

- 8.B2.1 demonstrate an understanding of the components of a range of physical activities (e.g., movement skills, game structures, basic rules and guidelines, conventions of fair play and etiquette), and apply this understanding as they participate in a variety of physical activities in indoor and outdoor environments
- 8.B2.2 demonstrate an understanding of how movement skills, concepts, and strategies are transferable across different physical activities within various categories (e.g., individual, target, net/wall, striking/fielding, territory), and identify skills, concepts, and strategies that they found effective while participating in a variety of physical activities in different categories
- 8.B2.3 apply a variety of tactical solutions to increase chances of success as they participate in physical activities (e.g., individual activities: use conscious breathing to enhance movement during a fitness activity; toss balls or beanbags in an even pattern and keep eyes focused at the peak of the toss when learning to juggle with three objects; target activities: position balls or rocks in a place that makes it difficult for the opposing team to score in games such as bocce or curling; net/wall activities: choose the type of shot and consider the placement of the shot to gain an offensive advantage; striking/fielding activities: send the object away from the defenders to allow for more time to score before the fielders retrieve the object; territory activities: send a pass that places the object closer to the goal; keep their body between the object and the defender while moving; practise using a fast transition from offence to defence)

Standard C: Healthy Living

C1. Healthy Living Standard: demonstrate an understanding of factors that contribute to healthy development

- 8.C1.1. Healthy Eating: demonstrate an understanding of different types of nutrients (e.g., macronutrients and micro-nutrients) and their functions
- 8.C1.2. Personal Safety and Injury Prevention: identify situations that could lead to injury or death, (e.g., head injuries or concussions in contact sports; spinal cord injuries from falls or diving into unknown water; injuries in car accidents; mental, physical, emotional, or social harm resulting from mental health and/or addiction problems), and describe behaviours that can help to reduce risk (e.g., wearing protective gear, especially helmets; thinking before acting; avoiding conflicts that could lead to violence; avoiding diving into unknown

-
- water; being cautious when driving or riding ATVs, tractors, boats, or snowmobiles; being aware of food safety when cooking and preparing food; using self-acceptance, coping, and help-seeking skills)
- 8.C1.3.Substance Use, Addiction, and Related Behaviours: identify and describe the warning signs of substance misuse or abuse, addictions, and related behaviours (e.g., changes in behaviour, gradual withdrawal from social circles, a drop in academic performance) and the consequences that can occur (e.g., aggressive behaviours related to alcohol use that can lead to gender-based violence, dating violence, or sexual assault; financial problems resulting from online gambling; overdose as a result of misuse of prescription medications, including pain relievers; inability to make good decisions as a result of drug use; binge drinking and alcohol poisoning; injury, death, or legal charges resulting from accidents caused by impaired driving; self-harming behaviours related to mental illnesses such as depression that are exacerbated by substance abuse; fetal alcohol spectrum disorder [FASD] in children as a result of alcohol abuse by the mother during pregnancy)
 - 8.C1.4.Sexuality Education: identify and explain factors that can affect an individual's decisions about sexual activity, (e.g., previous thinking about reasons to wait, including making a choice to delay sexual activity and establishing personal limits; perceived personal readiness; peer pressure; desire; curiosity; self-concept; awareness and acceptance of gender identity and sexual orientation; physical or cognitive disabilities and possible associated assumptions; legal concerns; awareness of health risks, including risk of STIs and blood-borne infections; concerns about risk of pregnancy; use of alcohol or drugs; personal or family values; religious beliefs; cultural teachings; access to information; media messages), and identify sources of support regarding sexual health (e.g., a health professional [doctor, nurse, public health practitioner], a community elder, a teacher, a religious leader, a parent or other trusted adult, a reputable website)
 - 8.C1.5.Sexuality Education: identify ways of preventing STIs, including HIV, and/or unintended pregnancy, such as delaying first intercourse and other sexual activities until a person is older and using condoms consistently if and when a person becomes sexually active.

C2.Healthy Living Standard: demonstrate the ability to apply health knowledge and living skills to make reasoned decisions and take appropriate actions relating to their personal health and well-being;

- 8.C2.1.Healthy Eating: evaluate personal food choices on the basis of a variety of criteria, including serving size, nutrient content, energy value, and ingredients (e.g., fats, carbohydrates, protein, vitamins and minerals, calories, additives, allergens), preparation method, and other factors that can affect health and well-being
- 8.C2.2. Personal Safety and Injury Prevention: demonstrate the ability to assess situations for potential dangers (e.g., getting into a car with a stranger or an impaired, unlicensed, or inexperienced driver; dependencies or coercion in dating relationships; joining gangs; participating in violence; attending a party where alcohol or drugs are being used; using cosmetic procedures or treatments such as piercing, tattooing, crash diets, or tanning that involve potential health risks; exposure to infectious diseases through direct contact, sneezing, or coughing), and apply strategies for avoiding dangerous situations
- 8.C2.3.Substance Abuse, Addictions and Related Behaviours: explain how stress affects mental health and emotional well-being, and demonstrate an understanding of how to use a variety of strategies for relieving stress and caring for their mental health (e.g., engaging in physical activity, listening to music, resting, meditating, talking with a trusted individual, practising smudging)
- 8.C2.4.Sexuality Education: demonstrate an understanding of aspects of sexual health and safety, including contraception and condom use for pregnancy and STI prevention, the concept of consent, and matters they need to consider and skills they need to use in order to make safe and healthy decisions about sexual activity (e.g., self-knowledge; abstinence; delaying first intercourse; establishing, discussing, and respecting boundaries; showing respect; need for additional information and support; safer sex and pleasure; communication, assertiveness, and refusal skills)
- 8.C2.5.Sexuality Education: demonstrate an understanding of physical, emotional, social, and psychological factors that need to be considered when making decisions related to sexual health (e.g., sexually transmitted infections [STIs], possible contraceptive side effects, pregnancy, protective value of vaccinations, social labelling, gender identity, sexual orientation, self concept issues, relationships, desire, pleasure, cultural teachings)

C3. Healthy Living Standard: demonstrate the ability to make connections that relate to health and well-being – how their choices and behaviours affect both themselves and others, and how factors in the world around them affect their own and others’ health and well-being.

- 8.C3.1. Healthy Eating: identify strategies for promoting healthy eating within the school, home, and community (e.g., implementing school healthy food policies, launching healthy-eating campaigns, choosing healthy food items to sell in fundraising campaigns, getting involved in family meal planning, learning food preparation skills, urging local restaurants to highlight healthy food choices)
- 8.C3.2. Personal Safety and Injury Prevention: analyse the impact of violent behaviours, including aggression, anger, swarming, dating violence, and gender-based or racially based violence, on the person being targeted, the perpetrator, and bystanders, and describe the role of support services in preventing violence (e.g., help lines, school counsellors, social workers, youth programs, shelters, restorative justice programs, gay-straight student alliances)
- 8.C3.3. Sexuality Education: analyse the attractions and benefits associated with being in a relationship (e.g., support, understanding, camaraderie, pleasure), as well as the benefits, risks, and drawbacks, for themselves and others, of relationships involving different degrees of sexual intimacy

Standard D: Living Skills

D1. Living Skills Standard - Personal Skills: demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in connection with the expectations in the Active Living, Movement Competence, and Healthy Living strands for this grade.

- 8.D1.1 use self-awareness and self-monitoring skills to help them understand their strengths and needs,
- 8.D1.2 take responsibility for their actions
- 8.D1.3 recognize sources of stress
- 8.D1.4 monitor their own progress, as they participate in various physical activities, develop movement competence, and acquire knowledge and skills related to healthy living (e.g., Active Living: explain how knowing themselves – their likes, dislikes, strengths, and abilities – can help them determine which health-related and skill-related components of fitness to focus on when developing their fitness plan; Movement Competence: monitor improvements in their body control as they apply their understanding of the phases of movement – preparation, execution, follow-through – to the refinement of a variety of movement skills; Healthy Living: describe the importance of self-awareness in developing stress-management strategies)
- 8.D1.5 use adaptive, management, and coping skills to help them respond to the various challenges they encounter as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living (e.g., Active Living: manage their improvement of different health-related components of fitness by monitoring the frequency of their physical activity, the intensity of their activity, the types of activities they choose, and the length of time they are being active; Movement Competence: experiment with shifting weight and changing body position to find ways to make smoother transitions when performing a series of balances with a partner; Healthy Living: identify the type of support that is available to help with the various physical, emotional, cultural, social, and psychological issues that can arise in connection with sexuality and sexual health)

D2. Living Skills Standard - Interpersonal Skills: demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in connection with the expectations in the Active Living, Movement Competence, and Healthy Living strands for this grade.

- 8.D2.1 communicate effectively, using verbal or non-verbal means, as appropriate, and interpret information accurately as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living (e.g., Active Living: give examples of how to communicate information clearly and concisely in an emergency situation; Movement Competence: congratulate opponents on a good play in a sincere way; Healthy Living: make adjustments to suit particular audiences – parents, peers, younger students, community members – when communicating to promote healthy eating)

-
- 8.D2.2 apply relationship and social skills as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living to help them interact positively with others, build healthy relationships, and become effective team members (e.g., Active Living: cooperate with others by respecting their choice of activities; encourage others when participating in activities like cross-country running; Movement Competence: work with a partner to try out different types of passes to evade opponents; Healthy Living: explain the positive aspects and the risks associated with close personal relationships and different levels of physical intimacy)

D3.Living Skills Standard - Critical and Creative Thinking Skills: demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in connection with the expectations in the Active Living, Movement Competence, and Healthy Living strands for this grade.

- 8.D3.1 use a range of critical and creative thinking skills and processes to assist them in making connections, planning and setting goals, analysing and solving problems, making decisions, and evaluating their choices in connection with learning in health and physical education (e.g., Active Living: track and analyse changes in their health-related components of fitness over a designated period of time, and make any necessary adjustments in their fitness plans; plan ways to promote the involvement of all the students in the school in “healthy schools” activities such as litterless lunch programs and active recess activities; Movement Competence: explain how developing movement competence and building confidence influence the extent to which people participate in physical activity; Healthy Living: analyse potentially dangerous situations and devise solutions for making them safer)

Grade 9

Standard A: Active Living

A1.Active Living Standard: participate actively and regularly in a wide variety of physical activities, and demonstrate an understanding of factors that can influence and support their participation in physical activity now and throughout their lives.

- 9.A1.1 actively participate in all aspects of the program (eg., being appropriately prepared and equipped to participate in the activity, being engaged in the activity, striving to do their personal best, adapting to challenges when exploring new activities, monitoring their progress and successes in order to boost their confidence and increase their willingness to try new activities), choosing from a wide and varied range of activities (eg., fitness and individual/partner activities, such as yoga or Pilates; small and large-group activities, sports, and games,; recreational and outdoor pursuits)
- 9.A1.2 demonstrate an understanding of factors that contribute to their personal enjoyment of being active and that can support their participation in physical activity throughout their lives (eg., health benefits, such as feeling better and having more energy and stamina; pleasure of movement; being able to adapt games for different purposes; having maximum opportunity for participation, access to facilities and programs, sufficient practise time, support of family and friends; having opportunities to pursue personal and cultural interests, compete, and interact socially while being active; participating in challenging activities that allow for success and promote confidence), and identify challenges and barriers to regular physical activity and actions they can take to overcome these (eg., transferring activities to an indoor location or changing outdoor clothing in response to changes in the weather, working out with a friend to maintain motivation and engagement, using time-management skills to schedule physical activity so that it does not interfere with family responsibilities or employment)

-
- 9.A1.3 demonstrate positive social behaviours and adherence to ethical and fair play standards that contribute to creating a rewarding and enjoyable environment for participation in physical activities (eg., work effectively and collaboratively in groups by encouraging others, acknowledging others' contributions, giving and receiving assistance, playing fair and displaying good activity etiquette, providing leadership)

A2. Active Living Standard: demonstrate an understanding of the importance of being physically active and apply physical fitness concepts and practices that contribute to healthy, active living

- 9.A2.1 participate regularly in sustained moderate to vigorous physical activity to the best of their ability for a minimum of twenty minutes (eg., aerobic fitness blasts, capture the flag, continuous play in small-sided games, Jump Rope/Fitness routines)
- 9.A2.2 explain how to use the basic training principles to enhance fitness levels (eg., increasing the frequency, intensity, and/or duration of the activity or exercise over time to enhance fitness; participating in physical activities that develop specific aspects of fitness, as when using aerobic activity to improve cardiorespiratory fitness or doing in-line skating or skateboarding to develop balance or agility), and explain the benefits of developing fitness as a part of an overall healthy active way of life
- 9.A2.3 demonstrate an understanding of their level of fitness during various physical activities, and monitor changes in their fitness levels over time
- 9.A2.4 develop, implement, and revise a group fitness plan (eg., analyse their own strengths and limitations to determine a starting point and set goals; apply training principles to help achieve goals; develop strategies to overcome challenges; celebrate successes; revise goals or fitness routines as needed)

A3. Active Living Standard: demonstrate responsibility for their own safety and the safety of others as they participate in physical activities.

- 9.A3.1 demonstrate behaviours and apply procedures that maximize their safety and that of others (eg., wearing appropriate clothing and required protective equipment, ensuring that they are carrying personal medical devices such as inhalers or epinephrine autoinjectors, participating in warm-up and cool-down activities, acting as a spotter for a friend in strength-training activities, using equipment and facilities correctly and in an appropriate manner, performing a safety check of the area before starting an activity, swimming with a buddy and in a supervised area) in a variety of physical activity settings (eg., gym, fitness room, field, hiking and snow trails, recreational facilities)

Standard B: Performance Competence: Skills, Concepts, and Strategies

B1. Performance Competence: Skills, Concepts, and Strategies Standard: perform movement skills, demonstrating awareness of the basic requirements of the skills and applying movement concepts as appropriate, as they engage in a variety of physical activities

- 9.B1.1 perform stability and locomotor skills in combination in a variety of physical activities while responding to external stimuli (eg., maintain balance and keep core muscles tight while doing lunges with or without hand weights; maintain balance while moving during aerobic routines; run/wheel to complete an orienteering course while demonstrating awareness of objects on the trail; show awareness of the position of the bar when taking off and landing during a high jump)

- 9.B1.2 perform locomotor and manipulation skills in combination in a variety of physical activities while responding to external stimuli (eg., send a rock, using an appropriate amount of force, to remove the opposing team's rock in curling; move body into position to retain possession in ultimate disc forehand or backhand pass or shot in sledge hockey)
- 9.B1.3 demonstrate an understanding of the phases of movement, and apply this understanding to refine skills as they participate in a variety of physical activities (eg., doing a full-turn jump in hip hop, sending an object in a target game and in an invasion game, receiving and retaining an object in an invasion game, performing a tennis or badminton forehand shots)
- 9.B1.4 apply appropriate movement principles in order to refine skills in a variety of physical activities (eg., bend knees and keep feet apart to lower the centre of mass and produce a stable base of support when in a ready position; extend joints to produce more force when throwing or striking)

B2. Performance Competence: Skills, Concepts, and Strategies: apply movement strategies appropriately, demonstrating an understanding of the components of a variety of physical activities, in order to enhance their ability to participate successfully in those activities.

- 9.B2.1 demonstrate an understanding of the components of a range of physical activities (eg., movement skills, game structures, basic rules and guidelines, conventions of fair play and etiquette) and apply this understanding as they participate in a wide variety of physical activities in a range of indoor and outdoor environments (eg., gym, fitness room, ice rink, pool, park, recreational facilities, hiking and snow trails)
- 9B2.2 apply analytical and problem-solving skills to identify and implement tactical solutions that will increase their chances of success as they participate in a variety of physical activities (eg., individual activities: alter a movement sequence to improve the flow in a dance or fitness routine or in a game; choose a hiking trail suited to their experience or fitness level; target activities: focus mentally on the target and ignore external distractions in order to enhance aim and accuracy; net/wall activities: direct an object to the part of the court that is the hardest for the opponent to cover; striking/fielding activities: apply spin to the ball to make it more difficult for the opponent to strike; invasion activities: create space by using a give and go play to get to an open space and receive a return pass; stay between the opponent and the goal when defending)
- 9.B2.3 demonstrate an understanding, through participation and discovery, of how developing their ability to apply movement skills, concepts, and strategies in various physical activities affects their competence, confidence, and desire to participate in these and other physical activities

Standard C: Healthy Living

C1. Healthy Living Standard: demonstrate an understanding of factors that contribute to healthy development

- 9.C1.1. Healthy Eating: explain how active living and healthy eating contribute to a person's physical health and mental, emotional, and spiritual well-being, and describe the benefits of a holistic approach to health (eg. provides more energy, helps body develop to full physical potential, increases self esteem)
- 9.C1.2. Personal Safety and Injury Prevention: demonstrate an understanding of the benefits and risks of using electronic communication technologies (easy access to useful information and entertainment but also to harmful or undesirable information and entertainment, such as

pornography; enhanced ability to stay in touch with friends but also increased possibility of exposure to sexual predators, bullying, and sexting; ability to communicate one's thoughts and creative efforts to the rest of the world but also increased potential for loss of privacy), and describe strategies that they can apply to ensure their safety while using these technologies

- 9.C1.3.Substance Use, Addiction, and Related Behaviours: demonstrate an understanding of resilience and related protective and risk factors, and explain how these can affect choices related to substance use and addictions
- 9.C1.4.Sexuality Education: identify the relative effectiveness and various methods of preventing unintended pregnancy or sexually transmitted infections (STI's), including HIV/AIDS (avoiding oral, vaginal, and anal intercourse; delaying first sexual intercourse; using protection, including barrier and hormonal methods, to prevent unintended pregnancy; using condoms and dental dams to protect against STI's) and identify sources of information and support (eg. doctor, nurse practitioner, public health unit, parents, credible and accurate websites)
- 9.C1.5.Sexuality Education: demonstrate an understanding of factors (eg., acceptance, stigma, culture, religion, media, stereotypes, homophobia, self-image, self-awareness) that can influence a person's understanding of their gender identity (eg., male, female, two-spirited, transgender, transsexual, intersex) and sexual orientation (eg., heterosexual, gay, lesbian, bisexual), and identify sources of support for all students
- 9.C1.6.Sexuality Education: demonstrate an understanding of gender identity (eg., male, female, two-spirited, transgender, transsexual, intersex), gender expression, and sexual orientation (eg., heterosexual, gay, lesbian, bisexual) and identify factors that can help individuals of all identities and orientations develop a positive self-concept

C2.Healthy Living Standard: demonstrate the ability to apply health knowledge and living skills to make reasoned decisions and take appropriate actions relating to own personal health and well-being;

- 9.C2.1. Healthy Eating: apply their knowledge of basic nutrition principles and healthy eating practices (eg., relating food intake to activity level, ensuring their diet includes foods from all food groups in the food guide, using healthy preparation methods) to develop a healthy eating plan
- 9.C2.2.Sexuality Education: demonstrate an understanding of the skills and strategies needed to build healthy social relationships (eg., peer, school, family, work) and intimate relationships
- 9.C2.3.Sexuality Education: apply their knowledge of sexual health and safety, including a strong understanding of the concept of consent and sexual limits, and their decision-making skills to think in advance about their sexual health and sexuality

C3.Healthy Living Standard: demonstrate the ability to make connections that relate to health and well-being – how their choices and behaviours affect both themselves and others, and how factors in the world around them affect their own and others' health and well-being.

- 9.C3.1. Healthy Eating: analyse the influence of social and environmental factors on food and beverage choices (eg., financial status, culture, religion, media influence, peer influence, family food traditions, accessibility of different kinds of food, restaurant choices, proximity to where food was produced, environmental impact of food production methods)
- 9.C3.2.Personal Safety and Injury Prevention: identify warning signs and symptoms that could be related to mental health concerns (eg., inability to cope with stress; feelings of sadness, anxiety, hopelessness, or worthlessness; negative thoughts about oneself, others, and the future;

thoughts of suicide), and describe a variety of strategies for coping with or responding to mental health concerns affecting oneself or others

- 9.C3.3. Personal Safety and Injury Prevention: describe skills and strategies (eg. communication, social, refusal, adaptive, and coping skills, conflict resolution strategies) that can be used to prevent or respond to situations of verbal, physical, and social bullying and sexual harassment (eg., gender-based violence, dating violence, domestic violence, homophobia comments, racial teasing or conflict, weight-based teasing, ostracising behaviour, coercive behaviour, inappropriate sexual behaviour)
- 9.C3.4. Personal Safety and Injury Prevention: describe social factors that may influence substance use (eg., use of prescription drugs, alcohol, tobacco, chewing tobacco, nutritional supplements, performance-enhancing drugs) or behaviours leading to addictions (eg., gambling; video, internet, or computer gaming; eating disorders), and explain how decision-making and communication skills can be used to respond effectively to these influences

Standard D: Living Skills

D1. Living Skills Standard - Personal Skills: demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in connection with the expectations in the Active Living, Performance Competence, and Healthy Living strands for this grade.

- 9.D1.1 use self-awareness and self-monitoring skills to help them understand their strengths and needs,
- 9.D1.2 take responsibility for their actions,
- 9.D1.3 recognize sources of stress,
- 9.D1.4 monitor their own progress, as they participate in various physical activities, develop performance competence, and acquire knowledge and skills related to healthy living (e.g., Active Living: explain how knowing themselves - their likes, dislikes, strengths, and abilities - can contribute to their enjoyment of being active and support their participation in physical activity; Performance Competence: assess their technique when performing manipulation skills, such as sending, receiving, or retaining, to determine what adjustments need to be made to improve these skills; Healthy Living: describe the importance of understanding their personal strengths and values and using this understanding to guide them in making thoughtful decisions about their health)
- 9.D1.5 use adaptive, management, and coping skills to help them respond to the various challenges they encounter as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living (e.g., Active Living: use time-management and organizational skills to plan for being active on a daily basis; Performance Competence: refine movements by using feedback from others and self-assessment in order to correct body position during different phases of a skill; Healthy Living: identify supports that are available to help individuals cope with the psychological, social, and physical challenges and related stresses that may come with questioning their gender identity, their sexual orientation, or the way they express their gender by how they choose to act, dress, behave, and interact with others)

D2. Living Skills Standard - Interpersonal Skills: demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in connection with

the expectations in the Active Living, Performance Competence, and Healthy Living strands for this grade.

- 9.D2.1 communicate effectively, using verbal or non-verbal means, as appropriate, and interpret information accurately as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living (e.g., Active Living: describe how to communicate information clearly and concisely when in emergency situations; Performance Competence: communicate with a partner during a doubles match in a net/wall game or a teammate in an invasion game to ensure cohesive play; Healthy Living: demonstrate, through role play, the ability to reach out with compassion to a friend who seems to be struggling emotionally or the ability to use assertiveness skills to respond to situations or comments that might trigger conflict)
- 9.D2.2 apply relationship and social skills as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living to help them interact positively with others, build healthy relationships, and become effective team members (e.g., Active Living: show respect for decisions and calls of peers who are officiating game activities; Performance Competence: work cooperatively with a partner to complete a series of tasks in activities such as orienteering; Healthy Living: describe strategies that can help them make healthy and affordable food choices when their friends prefer eating at fast-food restaurants)

D2.Living Skills Standard - Critical and Creative Thinking: demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in connection with the expectations in the Active Living, Performance Competence, and Healthy Living strands for this grade.

- 9.D2.1 use a range of critical and creative thinking skills and processes to assist them in making connections, planning and setting goals, analysing and solving problems, making decisions, and evaluating their choices in connection with learning in health and physical education (e.g., Active Living: use self-assessment information to identify adjustments that may be necessary in their fitness plans; Performance Competence: explain how the ability to apply movement skills, concepts, and strategies affects their movement competence and confidence and encourages their lifelong participation in physical activity; Healthy Living: describe strategies, such as planning in advance, weighing pros and cons, or considering consequences, that they can use to make decisions in a variety of situations: on small daily matters such as getting a ride or walking to school; matters with longer-term impacts such as the selection of courses that lead to a desired career path; or matters related to personal health and safety such as using the Internet and social media, texting, and reacting positively and proactively to peer pressure to smoke, take drugs, or drink alcohol in social situations)

Grade 10

Standard A: Active Living

A1.Active Living Standard: Participate actively and regularly in a wide variety of physical activities, and demonstrate an understanding of factors that can influence and support their participation in physical activity now and throughout their lives.

-
- 10.A1.1 actively participate in all aspects of the program (eg., being appropriately prepared and equipped to participate in the activity, being engaged in the activity, striving to do their personal best, adapting to challenges when exploring new activities, monitoring their progress and successes in order to boost their confidence and increase their willingness to try new activities), choosing from a wide and varied range of activities (eg., fitness and individual/partner activities, such as yoga or Pilates; small and large-group activities, sports, and games; recreational and outdoor pursuits)
 - 10.A1.2 demonstrate an understanding of factors that contribute to their personal enjoyment of being active and that can support their participation in physical activity throughout their lives, and explain what actions they can take to overcome challenges and barriers to regular physical activity
 - 10.A1.3 demonstrate positive social behaviours and adherence to ethical and fair play standards that contribute to creating a rewarding and enjoyable environment for participation in physical activities (eg., encourage others; show respect for others' point of view; listen attentively; show appreciation; encourage fair play; be inclusive; provide leadership by leading an in-class activity such as a warm-up or cool-down or suggesting ways to adapt an activity so that individuals with different physical or intellectual abilities can successfully participate)

A2.Active Living Standard: demonstrate an understanding of the importance of being physically active and apply physical fitness concepts and practices that contribute to healthy, active living

- 10.A2.1 participate regularly in sustained moderate to vigorous physical activity to the best of their ability for a minimum of twenty minutes (eg., continuous circuit training, team games, ultimate disc, swimming)
- 10.A2.2 describe the short-term and long-term benefits of developing both health-related fitness (cardiorespiratory fitness, muscular strength, muscular endurance, flexibility, and body composition) and skill-related fitness (balance, agility, power, reaction time, speed, and coordination), and explain factors that affect physical fitness (eg., eating habits; heredity; social, economic, and cultural influences; maturation; physical challenges; effectiveness of training routines and adherence to training principles)
- 10.A2.3 demonstrate an understanding of their level of fitness during various physical activities, as well as their classmates, and monitor changes in their health-related fitness over time
- 10.A2.4 develop, implement, and revise a personal fitness plan (use data from their fitness assessment and an analysis of their own strengths and limitations to determine a starting point and set goals; apply training principles to help achieve goals; develop strategies to overcome challenges; celebrate successes; revise goals or training routines as needed)

A3.Active Living Standard: demonstrate responsibility for their own safety and the safety of others as they participate in physical activities.

- 10.A3.1 demonstrate behaviours and apply procedures that maximize their safety and that of others (eg., controlling level of physical contact during activities; adjusting activity levels to adapt to changes in their physical condition; wearing safety equipment where necessary, such as when wall-climbing and cycling; demonstrating social responsibility by creating a safe activity environment and encouraging others to do so; working with a buddy when hiking, cross-country skiing or swimming) in a variety of physical activity settings (eg., gym fitness room, field, hiking and snow trails, recreational facilities, bicycle lanes)

-
- 10.A3.2 identify resources that can be of assistance in emergency situations related to physical activity (e.g., automated external defibrillator (AED) to restart the heart; first-aid kit for minor injuries; communication devices such as intercoms, walkie-talkies, and cell phones; GPS device for determining location; flotation device or reaching pole for assisting a person struggling in the water; epinephrine auto injector for someone with a severe allergic reaction or inhaler for someone with asthma)

Standard B: Performance Competence - Skills, Concepts, and Strategies

B1.Performance Competence - Skills, Concepts, and Strategies: perform movement skills, demonstrating awareness of the basic requirements of the skills and applying movement concepts as appropriate, as they engage in a variety of physical activities

- 10.B1.1 perform stability and locomotor skills in combination in a variety of physical activities while responding to external stimuli (eg., move through a variety of stations in an obstacle course; demonstrate a sequence of positions and movements while dancing to music; perform a flip turn in aquatics)
- 10.B1.2 perform locomotor and manipulation skills in combination in a variety of physical activities while responding to external stimuli (eg., send objects, varying distance and placement, to advance runners in striking/fielding activities; move into position to receive an object in net/wall activities; maintain control of the ring while moving towards the opponent's net in a game of ringette; throw a ball, perform a full turn and catch the ball while performing a rhythmic movement sequence)
- 10.B1.3 demonstrate an understanding of the phases of movement, and apply this understanding to refine skills as they participate in a variety of physical activities
- 10.B1.4 apply appropriate movement principles in order to refine skills in a variety of physical activities (eg., extend all joints to achieve maximum force in the execution phase of an overhead or underhand serve in a net/wall activity; bend knees to lower centre of mass to increase stability in wrestling)

B2.Performance Competence - Skills, Concepts, and Strategies: apply movement strategies appropriately, demonstrating an understanding of the components of a variety of physical activities, in order to enhance their ability to participate successfully in those activities.

- 10.B2.1 demonstrate an understanding of the components of a range of physical activities (eg., movement skills, game structures, basic rules and guidelines, conventions of fair play and etiquette), and apply this understanding as they participate in a wide variety of physical activities in a range of indoor and outdoor environments (eg., gym, fitness room, ice rink, pool, park, recreational facilities, hiking and snow trails)
- 10.B2.2 apply analytical and problem-solving skills to identify and implement tactical solutions that will increase their chances of success as they participate in a variety of physical activities (eg., individual activities: pace themselves to conserve energy during an endurance run; choose a course suited to their experience or fitness level when orienteering; target activities: set up deflections from objects in the area of play to get around obstacles and get closer to the target; net/wall activities: maintain a ready position in order to be prepared to move in any direction to play the ball or shuttle when receiving a serve or when in transition between offence and defence; striking/fielding activities: if playing the outfield, shift to cover the area that the batter is most likely to hit to; communicate with teammates a out when to run; invasion activities: pay

attention to game play in order to be ready to respond and change quickly from offence to defence)

- 10.B2.3 demonstrate an understanding, through participation and discovery, of how developing their ability to apply movement skills, concepts, and strategies in various physical activities affects their competence, confidence, and desire to participate in these and other physical activities

Standard C: Healthy Living

C1. Healthy Living Standard: demonstrate an understanding of factors that contribute to healthy development

- 10.C1.1. Personal Safety and Injury Prevention: demonstrate an understanding of factors that enhance mental health and emotional and spiritual well-being
- 10.C1.2. Substance Use, Addiction, and Related Behaviours: demonstrate an understanding of the impact of substance use and addictive behaviours on all aspects (eg., physical, emotional, cognitive, spiritual, social, economic) of a person's health and well-being
- 10.C1.3 Sexuality Education: demonstrate an understanding of how relationships develop through various stages, and describe the skills and strategies needed to maintain a satisfactory relationship as the relationship evolves (eg., communication and interpersonal skills, adaptive and coping skills, conflict resolution strategies)

C2. Healthy Living Standard: demonstrate the ability to apply health knowledge and living skills to make reasoned decisions and take appropriate actions relating to their personal health and well-being

- 10.C2.1. Healthy Eating: explain how their knowledge of physical and emotional factors that influence personal eating habits (eg. level of physical activity, physical stage of development, hunger and satiety cues from their bodies, food allergies and sensitivities, hydration and nutritional needs, body image, peer and family influence, stress) can be applied to making healthy eating choices
- 10.C2.2. Healthy Eating: discuss the nutritional implications of a variety of dietary choices, including those reflecting current dietary trends, and explain how they can make personal choices that will provide the nutritional requirements for a healthy, active life
- 10.C2.3. Personal Safety and Injury Prevention: demonstrate the ability to analyse situations involving conflict within oneself (eg., moral and ethical struggles, decision-making problems) or conflict with others (eg., arguments, fights) and apply appropriate conflict resolution strategies (eg., for conflict within oneself: meditation, journal writing, seeking counseling, talking with a trusted adult or friend; for conflict with others: applying de-escalation techniques such as using calming words or taking a break to defuse a tense situation, getting support to respond to dating violence, seeking help from a person in authority)
- 10.C2.4. Substance Use, Addiction, and Related Behaviours: demonstrate the ability (eg., through role play, discussions, debates, analysis of hypothetical situations, case studies, scenarios) to apply adaptive, coping and management skills (eg., refusal, assertiveness, and persuasion skills; problem-solving and stress management skills; time-management and organizational skills) to respond to challenging situations involving substance use, addictions, and related behaviours
- 10.C2.5. Human Development and Sexual Health: describe factors that influence sexual decision making (eg., personal values, having limits and being able to communicate them,

being aware of and respecting the limits set by others, peer and family expectations, having physical and emotional desires, media messages, myths and norms related to sexual activity or safer sex practices, participation in activities such as substance use that impair judgement), and demonstrate an understanding of how to use decision-making and communication skills effectively to support choices related to responsible and healthy sexuality

C3. Healthy Living Standard: demonstrate the ability to make connections that relate to health and well-being – how their choices and behaviours affect both themselves and others, and how factors in the world around them affect their own and others' health and well-being.

- 10.C3.1. Healthy Eating: demonstrate an understanding of how they, as consumers, can have an impact on food and beverage choices at school and in the community (eg., promoting availability of healthy choices in restaurant and cafeteria menus and in grocery stores, raising awareness of ethical and environmental considerations related to food choices)
- 10.C3.2. Personal Safety and Injury Prevention: demonstrate an understanding of health and safety risks in their physical and personal environment, and describe practices and behaviours that can be promoted to minimize the exposure of themselves and others to these risks (eg., thinking in advance of the consequences of actions; getting reliable information; following health practices such as handwashing to reduce risks associated with the spread of infectious diseases; staying hydrated; observing road safety rules while biking and walking; avoiding distractions such as using headphones while cycling and walking; listening to music at safe volumes to avoid hearing damage; using insect repellent; wearing a helmet when skiing, cycling, skateboarding)
- 10.C3.3. Substance Use, Addiction, and Related Behaviours: identify public issues related to various addictions (eg., alcohol, drugs, gambling, tobacco), and analyse their impacts and the connections between these impacts locally, nationally, and internationally
- 10.C3.4. Sexuality Education: describe some common misconceptions about sexuality in our culture, and explain how these may cause harm to people and how they can be responded to critically and fairly
- 10.C3.5. Sexuality Education: explain how being in an exclusive relationship with another person affects them and their relations with others (eg., personal benefits such as learning about oneself, emotional comfort and security, sense of belonging; impact on peer relationships, family relationships, time management, homework, choice of activities; feelings and challenges involved in ending a relationship)

Standard D: Living Skills

D1. Living Skills Standard - Personal Skills: demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in connection with the expectations in the Active Living, Performance Competence, and Healthy Living strands for this grade.

- 10.D1.1 use self-awareness and self-monitoring skills to help them understand their strengths and needs,
- 10.D1.2 take responsibility for their actions,
- 10.D1.3 recognize sources of stress,
- 10.D1.4 monitor their own progress, as they participate in various physical activities, develop movement competence, and acquire knowledge and skills related to healthy living (e.g., Active Living: consider what effect their background [family, social, economic, cultural] and

experiences have had on the way they think about physical activity or the activities they choose; Performance Competence: monitor changes in their body positions during various phases of movement to improve their locomotor and manipulation skills; Healthy Living: describe ways to recognize sources of stress and assess the relative importance of their stressors)

- 10.D1.5 use adaptive, management, and coping skills to help them respond to the various challenges they encounter as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living (e.g., Active Living: use planning skills to adjust goals and training schedules and revise fitness plans in response to their ongoing monitoring and assessment of their progress in developing their personal fitness; Performance Competence: describe how adopting a positive attitude, practising regularly, and using constructive feedback for self-correction contribute to being successful when developing new skills; Healthy Living: explain how paying attention to one's own emotions and expressing them in a positive way can assist in avoiding a conflict or preventing a conflict from escalating; describe how various coping strategies can be used to enhance their mental health and well-being)

D2.Living Skills Standard - Interpersonal Skills: demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in connection with the expectations in the Active Living, Performance Competence, and Healthy Living strands for this grade.

- 10.D2.1 communicate effectively, using verbal or non-verbal means, as appropriate, and interpret information accurately as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living (e.g., Active Living: use respectful words when communicating with others during activities; Performance Competence: use non-verbal communication, such as making eye contact with a teammate or looking for a target hand when passing an object during a territory game; Healthy Living: demonstrate the ability, through role play, to use refusal skills to deal with potentially challenging situations involving the illicit use of drugs)
- 10.D2.2 apply relationship and social skills as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living to help them interact positively with others, build healthy relationships, and become effective team members (e.g., Active Living: support others by encouraging them and/or providing them with assistance when they are participating or learning new skills in a variety of physical activities; Performance Competence: apply appropriate conventions of fair play and etiquette and demonstrate inclusiveness as they participate in a variety of physical activities; Healthy Living: explain why being respectful is an important contributor to maintaining healthy relationships)

D3.Living Skills Standard - Critical and Creative Thinking: demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in connection with the expectations in the Active Living, Performance Competence, and Healthy Living strands for this grade.

- 10.D3.1 use a range of critical and creative thinking skills and processes to assist them in making connections, planning and setting goals, analysing and solving problems, making decisions, and evaluating their choices in connection with learning in health and physical education (e.g., Active Living: explain the connections between active living and personal

fitness, and describe the benefits of being active and fit; Performance Competence: evaluate the offensive and defensive strategies that they used during various activities, and determine what they could do differently to improve their performance in those activities; Healthy Living: describe how current dietary trends could influence their food choices, and explain the implications of these choices for healthy development and active living)



PK-Grade 5 Health Standards and Benchmarks (for application within Homeroom Units of Inquiry)



CI: Health (for PSPE within PYP Homeroom UOIs)

Grade 1

C1. Healthy Living Standard: demonstrate an understanding of factors that contribute to healthy development

- 1.C1.1 explain why people need food to have a healthy body (e.g., food provides energy for the healthy growth of teeth, skin, bones, muscles, and other body components)
- 1.C1.2 demonstrate an understanding of essential knowledge and practices for ensuring their personal safety (PE: pool safety, safe handling of the equipment,..)(e.g., knowing their home phone numbers; knowing how to contact 9-1-1; seeking help from a police officer, teacher, elder, or other trusted adult; knowing routines for safe pick-up from school or activities)
- 1.C1.3 identify body parts (including their genitals) using correct terminology
- 1.C1.4 identify the five senses and describe how each functions identify the five senses and describe how each functions (e.g., sight: the eyes give the brain information about the world to help us see colours, shapes, and movement; touch: receptors in the skin tell us how things feel – if they are hot, cold, wet, dry, hard, soft; hearing: the ears pick up vibrations and send messages to the brain to help us hear sounds that are loud or soft, high- or low-pitched; smell and taste: the tongue is covered with thousands of taste buds and the nose has tiny hairs and nerves that send messages to the brain about how things taste and smell)

C2. Healthy Living Standard: -demonstrate the ability to apply health knowledge and living skills to make reasoned decisions and take appropriate actions relating to their personal health and well-being;

	<ul style="list-style-type: none"> • 1.C2.1 describe how the food groups in the Food Guide (i.e., vegetables and fruit, grain products, milk and alternatives, meat and alternatives) can be used to make healthy food choices Could potentially cover in G1, not in depth • 1.C2.2 know and recognize cues to hunger, thirst, and the feeling of fullness, and explain how they can use these cues to develop healthy eating habits • 1.C2.3 demonstrate the ability to recognize caring behaviours (e.g., listening with respect, giving positive reinforcement, being helpful) and exploitative behaviours (e.g., inappropriate touching, verbal or physical abuse, bullying), and describe the feelings associated with each • 1.C2.4 apply their knowledge of essential safety practices to take an active role in their own safety at school (e.g., inform teacher of allergies, be aware of food safety issues, play in supervised areas, follow safe routines for travelling to and from school) • 1.C2.5 demonstrate an understanding of and apply proper hygienic procedures for protecting their own health and preventing the transmission of disease to others (e.g., washing hands with soap, using a tissue, sleeve sneezing, brushing and flossing teeth, not sharing hats or hair brushes)
<p>C3. Healthy Living Standard: demonstrate the ability to make connections that relate to health and well-being – how their choices and behaviours affect both themselves and others, and how factors in the world around them affect their own and others' health and well-being.</p>	
	<ul style="list-style-type: none"> • 1.C3.1 demonstrate an understanding of how to stay safe and avoid injuries to themselves and others in a variety of situations, using knowledge about potential risks at home, in the community, and outdoors (e.g., items or situations that could lead to poisoning, slips, falls, fire, or injury, including injuries from household products, medicines, kitchen tools and equipment, insecure furniture, candles, toys; road, water, and playground hazards; weather and sun hazards) • 1.C3.2 identify habits and behaviours (e.g., excessive screen time or video game usage, smoking) that can be detrimental to health, and explain how people can be encouraged to adopt healthier alternatives
<p>Focus Grade 1 PYP outcomes:</p>	
	<ul style="list-style-type: none"> • Our daily practices can have an impact on our well-being. • We can observe changes in our body when we exercise • Our bodies change as we grow • Nutrition; food groups, observing changes in our bodies (when exercising; over time) • Digestive system - basics

Grade 2

<p>C1. Healthy Living Standard: demonstrate an understanding of factors that contribute to healthy development</p>

	<ul style="list-style-type: none"> • 2.C1.1 demonstrate an understanding of practices that enhance personal safety in the home (e.g., observing precautions for answering the phone and door, establishing home fire escape strategies, respecting electrical outlet covers, following precautions for preparing and storing foods, washing hands) and outdoors (e.g., using UV protection; observing safety rules when riding the bus, riding a bicycle, walking to school, approaching railway tracks and crossings; carrying medication for allergic reactions; being cautious when approaching animals) • 2.C1.2 identify common food allergies and sensitivities (e.g., to peanuts, tree nuts, milk, eggs, fish) and the reactions they might cause (e.g., swelling, skin rash, difficulty breathing, abdominal cramps, vomiting, diarrhea, coma, death) • 2.C1.3 describe the difference between prescription medicines and non-prescription medicines, giving examples of each, and identify rules for the proper use of all medicines • 2.C1.4a outline the basic stages of human development (e.g., infant, child, adolescent, adult, older adult) • 2.C1.4b related bodily changes, and identify factors that are important for healthy growth and living throughout life
<p>C2. Healthy Living Standard: demonstrate the ability to apply health knowledge and living skills to make reasoned decisions and take appropriate actions relating to their personal health and well-being;</p>	
	<ul style="list-style-type: none"> • 2.C2.1 use the Food Guide to assess the nutritional value of meals (e.g., in terms of food groups and number and size of servings), and identify food and beverage choices that enhance healthy growth and development • 2.C2.2 demonstrate an understanding of how to make healthy food choices for meals and snacks, considering the factors they can and cannot control (e.g., the food that’s available in the home; the food that’s available when eating out; energy needed at different times of day; allergies; food guidelines associated with medical conditions such as diabetes or celiac disease; food safety related to food preparation, storage, handling, and cleanliness) • 2.C2.3 explain the importance of standing up for themselves, and demonstrate the ability to apply behaviours that enhance their personal safety in threatening situations (e.g., speaking confidently; stating boundaries; saying no; respecting the right of a person to say no and encouraging others to respect that right also; reporting exploitive behaviours, such as improper touching of their bodies or others’ bodies) • 2.C2.4 demonstrate an understanding of and apply practices that contribute to the maintenance of good oral health (e.g., brushing, flossing, going to the dentist regularly for a checkup)
<p>C3. Healthy Living Standard: demonstrate the ability to make connections that relate to health and well-being – how choices and behaviours affect oneself and others, and how factors in the world around us affect own and others’ health and well-being.</p>	

	<ul style="list-style-type: none"> • 2.C3.1 describe how to relate positively to others (e.g., cooperate, show respect, smile, manage anger, pay attention to what people say and to their facial expressions and body language), and describe behaviours that can be harmful in relating to others (e.g., verbal abuse, including both online and face-to-face name calling, insults, and mocking; deliberately ignoring someone, or ignoring the feelings they express; physical violence, including pushing, kicking, and hitting) • 2.C3.2 describe methods that may be used instead of or in combination with medication to maintain good health and prevent or treat various health problems (e.g., getting more sleep to help get rid of a cold; getting more fresh air and physical activity to relieve headaches; eating healthier meals as recommended in Food Guide; using natural healing practices) • C3.1 explain how local fresh foods and foods from different cultures (e.g., berries, curries, chapattis, lychees, kale, lentils, corn, nan, wild game, fish, tourtière) can be used to expand their range of healthy eating choices • 3.C3.2 explain how the portrayal of fictional violence in various media (e.g., television dramas, video games, Internet, movies) can create an unrealistic view of the consequences of real violence (e.g., physical trauma, chronic disability, family stress, death)
Focus Grade 2 PYP outcomes:	
	<ul style="list-style-type: none"> • Regular exercise is part of a healthy lifestyle. • Food choices can affect our health. • Maintaining good hygiene can help to prevent illness. • Body systems: focusing on nutrition

Grade 3

C1. Healthy Living Standard: demonstrate an understanding of factors that contribute to healthy development

- 3.C1.1 demonstrate an understanding of how the origins of food (e.g., where the food is grown, how it is made) affect its nutritional value and environmental impact.
- 3.C1.2 demonstrate an understanding of different types of legal and illegal substance abuse (e.g., dependency on nicotine in cigarettes or caffeine in coffee, energy drinks, and colas, or sugar and salt in sports drinks, or alcohol in beer, wine, and spirits) and the impacts of abusing these substances on themselves and others (e.g., dependencies or addictions, financial stresses, legal issues, health issues, environmental issues)
- 3.C1.3 identify the characteristics of healthy relationships (e.g., accepting differences, being inclusive, communicating openly, listening, showing mutual respect and caring, being honest)
- 3.C1.4 describe ways of overcoming challenges (e.g., bullying, exclusion, peer pressure, abuse) in a relationship
- 3.C1.5 identify factors (e.g., sleep, food, physical activity, heredity, environment, support from a caring adult, sense of belonging, peer influence) that affect physical development (e.g., of hair, skin, teeth, body size and shape) and/or emotional development (e.g., of self-awareness, adaptive skills, social skills)

C2. Healthy Living Standard: - demonstrate the ability to apply health knowledge and living skills to make reasoned decisions and take appropriate actions relating to their personal health and well-being;

	<ul style="list-style-type: none"> • 3.C2.1 demonstrate an understanding of the importance of good oral health to overall health, and assess the effect of different food choices on oral health • 3.C2.2 apply their understanding of good safety practices by developing safety guidelines for a variety of places and situations outside the classroom (e.g., guidelines for water safety; safe routes and practices for going to school; home fire safety and emergency plans; safe camping checklists; guidelines for safe Internet use; guidelines for personal hygiene and the prevention of infectious diseases; wildlife safety precautions; guidelines for managing allergies; Halloween safety practices; rules for behaviour around guide dogs, other service animals, and animals in general) • 3.C2.3 apply decision-making strategies to make healthy choices about behaviours and the use of various substances in ways that could lead to dependencies, identifying factors that should be considered (e.g., short-term use of medications can be helpful for an illness, but misuse of some medications could lead to dependency or harm; moderated television watching or computer use can provide healthy entertainment or new learning or be necessary to complete school work, but too much screen time can reinforce sedentary habits and inactivity, which can lead to social isolation and increased vulnerability to physical ailments; cultural teachings can provide guidance when considering the impact of using substances)
<p>C3. Healthy Living: demonstrate the ability to make connections that relate to health and well-being – how their choices and behaviours affect both themselves and others, and how factors in the world around them affect their own and others’ health and well-being.</p>	
	<ul style="list-style-type: none"> • 3.C3.1 explain how local fresh foods and foods from different cultures (e.g., berries, curries, chapattis, lychees, kale, lentils, corn, nan, wild game, fish, tourtière) can be used to expand their range of healthy eating choices • 3.C3.2 explain how the portrayal of fictional violence in various media (e.g., television dramas, video games, Internet, movies) can create an unrealistic view of the consequences of real violence (e.g., physical trauma, chronic disability, family stress, death) • 3.C3.3 describe how visible differences (e.g., skin, hair, and eye colour, facial features, body size and shape, physical aids or different physical abilities, clothing, possessions) and invisible differences (e.g., learning abilities, skills and talents, personal or cultural values and beliefs, gender identity, sexual orientation, family background, personal preferences, allergies and sensitivities) make each person unique, and identify ways of showing respect for differences in others)
<p>Focus Grade 3 PYP outcomes:</p>	
	<ul style="list-style-type: none"> • Regular exercise, hydration, nutrition and rest are all important in a healthy lifestyle. • We can develop and maintain physical fitness by applying basic training principles. • Focus on 3 body systems - how do all of them interact?

Grade 4

C1. Healthy Living Standard: demonstrate an understanding of factors that contribute to healthy development

- 4.C1.1 identify the key nutrients (e.g., fat, carbohydrates, protein, vitamins, minerals) provided by foods and beverages
- 4.C1.2 describe the importance of the key nutrition for growth, health, learning, and physical performance
- 4.C1.3 identify risks associated with communications technology (e.g., Internet and cell phone use, including participation in gaming and online communities and the use of text messaging), describe precautions and strategies for using these technologies safely

- 4.C1.4 describe various types of bullying and abuse (e.g., social, physical, verbal), including bullying using technology (e.g., via e-mail, text messaging, chat rooms, websites), and identify appropriate ways of responding
- 4.C1.5 identify substances (e.g., nicotine, carbon monoxide, tar) found in tobacco products and smoke (e.g., cigarettes, cigars, pipe tobacco, chewing tobacco, snuff), and describe their effects on health
- 4.C1.6 describe the physical changes that occur in males and females at puberty (e.g., growth of body hair, breast development, changes in voice and body size, production of body odour, skin changes) and the emotional and social impacts that may result from these changes

C2. Healthy Living Standard: demonstrate the ability to apply health knowledge and living skills to make reasoned decisions and take appropriate actions relating to their personal health and well-being;

- 4.C2.1 analyse personal food selections through self-monitoring over time, using the criteria in the Food Guide (e.g., food groups, portion size, serving size)
- 4.C2.2 develop a simple healthy-eating goal appropriate to their age and activity level (e.g., eat breakfast every day; include at least one fruit or vegetable at each meal and snack; help with food shopping and meal preparation at home; plan a meal)
- 4.C2.3 apply a decision-making process (e.g., identify potential dangers and risks, consider ways to stay safe, consider the pros and cons of each option, consider whether they need to check with an adult, choose the safest option, act, reflect on their decision, consider whether there is anything they could improve for next time) to assess risks and make safe decisions in a variety of situations (e.g., when using a wheelchair, cycling, preparing food)
- 4.C2.4 demonstrate the ability to make and support healthy, informed choices about smoking, using their understanding of factors that affect decisions about smoking and a variety of personal and interpersonal skills and thinking processes (e.g., applying decision-making, assertiveness, and refusal skills; thinking in advance about values and personal choices; identifying the pros and cons of both making a change and not making a change; being aware of peer pressure; avoiding situations where people will be smoking; using conversational strategies, such as saying no strongly and clearly, giving reasons, changing the topic, making a joke, asking a question)
- 4.C2.5 demonstrate an understanding of personal care needs and the application of personal hygienic practices associated with the onset of puberty (e.g., increased importance of regular bathing/ showering and regular clothing changes; use of hygiene products; continuing importance of regular hygiene practices, including hand washing, oral health care, and care of prosthetic devices and residual limbs)

C3. Healthy Living Standard: demonstrate the ability to make connections that relate to health and well-being – how their choices and behaviours affect both themselves and others, and how factors in the world around them affect their own and others' health and well-being.

- 4.C3.1 identify ways of promoting healthier food choices in a variety of settings and situations (e.g., school, arena, recreation centre, stores, food courts, special events; when camping, having a snack or meal at a friend's house, eating on weekends versus weekdays)
- 4.C3.2 describe the short- and long-term effects of first- and second-hand smoke on smokers and on people around them

Focus Grade 4 PYP PSPE outcomes:

-
- Regular exercise, hydration, nutrition and rest are all important in a healthy lifestyle.
 - We can develop and maintain physical fitness by applying basic training principles
 - Focus on basic principles (FITT)- introduction to fitness; Nutrition, stress/sleep

Grade 5

C1. Healthy Living Standard: demonstrate an understanding of factors that contribute to healthy development

- 5.C1.1 identify people (e.g., parents, guardians, neighbours, teachers, crossing guards, police, older students, coaches, elders) and supportive services (e.g., help lines, 9-1-1, Telehealth, public health units, student services) that can assist with injury prevention, emergencies, bullying, and abusive and violent situations
- 5.C1.2 describe the short- and long-term effects of alcohol use, and identify factors that can affect intoxication (e.g., amount consumed, speed of consumption, sex, body size, combinations with other drugs or food, emotional state)
- 5.C1.3 identify the parts of the reproductive system, and describe how the body changes during puberty
- 5.C1.4 describe the processes of menstruation and spermatogenesis, and explain how these processes relate to reproduction and overall development

C2. Healthy Living Standard: demonstrate the ability to apply health knowledge and living skills to make reasoned decisions and take appropriate actions relating to their personal health and well-being

- 5.C2.1 explain how to use nutrition facts tables and ingredient lists on food labels to make healthier personal food choices
- 5.C2.2 demonstrate the ability to deal with threatening situations by applying appropriate living skills (e.g., personal skills, including self- monitoring and anger management; interpersonal skills, including conflict resolution skills; communication skills, including assertiveness and refusal skills) and safety strategies (e.g., having a plan and thinking before acting; looking confident; being aware of their surroundings and of people's body language, tone of voice, or facial expressions; seeking help; drawing on cultural teachings, where appropriate, to analyse situations and develop responses)
- 5.C2.3 demonstrate the ability to apply decision-making, assertiveness, and refusal skills to deal with pressures pertaining to alcohol use or other behaviours that could later lead to addiction (e.g., smoking, drug use, gambling)
- 5.C2.4. describe emotional and interpersonal stresses related to puberty (e.g., questions about changing bodies and feelings, adjusting to changing relationships, crushes and more intense feelings, conflicts between personal desires and cultural teachings and practices), and identify strategies that they can apply to manage stress, build resilience, and enhance their mental health and emotional well- being (e.g., being active, writing feelings in a journal, accessing information about their concerns, taking action on a concern, talking to a trusted peer or adult, breathing deeply, meditating, seeking cultural advice from elders)

C3. Healthy Living Standard: demonstrate the ability to make connections that relate to health and well-being – how their choices and behaviours affect both themselves and others, and how factors in the world around them affect their own and others' health and well-being.

-
- 5.C3.1 describe how advertising and media influences affect food choices (e.g., TV commercials, product packaging, celebrity endorsements, product placements in movies and programs, idealized body images in movies and programs, magazine articles promoting fad diets), and explain how these influences can be evaluated to make healthier choices (e.g., critically examining the reasons for Celebrity endorsements or the plausibility of product claims, checking whether there is information in the advertisement that verifies the claims, asking for information about product ingredients and nutrients, critically examining the reality and healthiness of idealized body images in the media, evaluating diet plans against accepted nutritional criteria such as those used in Food Guide)
 - 5.C3.2 explain how a person’s actions, either in person or online, can affect their own and others’ feelings, self-concept, emotional well-being, and reputation (e.g., negative actions such as name calling, making homophobic or racist remarks, mocking appearance or ability, excluding, bullying, sexual harassment [including online activities such as making sexual comments, sharing sexual pictures, or asking for such pictures to be sent]; positive actions such as praising, supporting, including, and advocating)
 - 5.C3.3 identify personal and social factors (e.g., emotional, physical, mental, spiritual, cultural, legal, media, and peer influences) that can affect a person’s decision to drink alcohol at different points in his or her life
 - 5.C3.4 describe how advertising and media influences affect food choices (e.g., TV commercials, product packaging, celebrity endorsements, product placements in movies and programs, idealized body images in movies and programs, magazine articles promoting fad diets), and explain how these influences can be evaluated to make healthier choices (e.g., critically examining the reasons for Celebrity endorsements or the plausibility of product claims, checking whether there is information in the advertisement that verifies the claims, asking for information about product ingredients and nutrients, critically examining the reality and healthiness of idealized body images in the media, evaluating diet plans against accepted nutritional criteria such as those used in Food Guide)

Grade 5 PYP PSPE Focus Outcomes:

- Identify and participate in activities we can enjoy can motivate us to maintain a healthy lifestyle.
- There is a connection between exercise, nutrition and physical well-being
- Setting personal goals and developing plans to archive these goals can enhance performance.
- Fitness principles; creating a workout routine, (setting personal goals, including a nutrition plan)



Science



PYP Grades PK-5

NGSS: Science and Engineering Practices

Practice 1. Asking questions (for science) and defining problems (for engineering)

NGSS: Kindergarten - Grade 2

Asking questions and defining problems in K–2 builds on prior experiences and progresses to simple descriptive questions that can be tested.

- Ask questions based on observations to find more information about the natural and/or designed world(s).
- Ask and/or identify questions that can be answered by an investigation.
- Define a simple problem that can be solved through the development of a new or improved object or tool.

NGSS: Grades 3-5

	NGSS: Grades 3-5
	Asking questions and defining problems in 3–5 builds on K–2 experiences and progresses to specifying qualitative relationships.
	<ul style="list-style-type: none"> • Ask questions about what would happen if a variable is changed. • Identify scientific (testable) and non-scientific (non-testable) questions. • Ask questions that can be investigated and predict reasonable outcomes based on patterns such as cause and effect relationships. • Use prior knowledge to describe problems that can be solved. • Define a simple design problem that can be solved through the development of an object, tool, process, or system and includes several criteria for success and constraints on materials, time, or cost.
	Practice 2. Developing and using models
	NGSS: Kindergarten - Grade 2
	Modeling in K–2 builds on prior experiences and progresses to include using and developing models (i.e., diagram, drawing, physical replica, diorama, dramatization, or storyboard) that represent concrete events or design solutions.
	<ul style="list-style-type: none"> • Distinguish between a model and the actual object, process, and/or events the model represents. • Compare models to identify common features and differences. • Develop and/or use a model to represent amounts, relationships, relative scales (bigger, smaller), and/or patterns in the natural and designed world(s). • Develop a simple model based on evidence to represent a proposed object or tool.
	NGSS: Grades 3-5
	Modeling in 3–5 builds on K–2 experiences and progresses to building and revising simple models and using models to represent events and design solutions.
	<ul style="list-style-type: none"> • Identify limitations of models. • Collaboratively develop and/or revise a model based on evidence that shows the relationships among variables for frequent and regular occurring events. • Develop a model using an analogy, example, or abstract representation to describe a scientific principle or design solution. • Develop and/or use models to describe and/or predict phenomena. • Develop a diagram or simple physical prototype to convey a proposed object, tool, or process. • Use a model to test cause and effect relationships or interactions concerning the functioning of a natural or designed system.
	Practice 3. Planning and carrying out investigations
	NGSS: Kindergarten -Grade 2
	Planning and carrying out investigations to answer questions or test solutions to problems in K–2 builds on prior experiences and progresses to simple investigations, based on fair tests, which provide data to support explanations or design solutions.

		<ul style="list-style-type: none"> • With guidance, plan and conduct an investigation in collaboration with peers (for K). • Plan and conduct an investigation collaboratively to produce data to serve as the basis for evidence to answer a question. • Evaluate different ways of observing and/or measuring a phenomenon to determine which way can answer a question. • Make observations (firsthand or from media) and/or measurements to collect data that can be used to make comparisons. • Make observations (firsthand or from media) and/or measurements of a proposed object or tool or solution to determine if it solves a problem or meets a goal. • Make predictions based on prior experiences.
NGSS: Grades 3-5		
		Planning and carrying out investigations to answer questions or test solutions to problems in 3–5 builds on K–2 experiences and progresses to include investigations that control variables and provide evidence to support explanations or design solutions.
		<ul style="list-style-type: none"> • Plan and conduct an investigation collaboratively to produce data to serve as the basis for evidence, using fair tests in which variables are controlled and the number of trials considered. • Evaluate appropriate methods and/or tools for collecting data. • Make observations and/or measurements to produce data to serve as the basis for evidence for an explanation of a phenomenon or test a design solution. • Make predictions about what would happen if a variable changes. • Test two different models of the same proposed object, tool, or process to determine which better meets criteria for success.
Practice 4. Analyzing and interpreting data		
NGSS: Kindergarten - Grade 2		
		Analyzing data in K–2 builds on prior experiences and progresses to collecting, recording, and sharing observations.
		<ul style="list-style-type: none"> • Record information (observations, thoughts, and ideas). • Use and share pictures, drawings, and/or writings of observations. • Use observations (firsthand or from media) to describe patterns and/or relationships in the natural and designed world(s) in order to answer scientific questions and solve problems. • Compare predictions (based on prior experiences) to what occurred (observable events). • Analyze data from tests of an object or tool to determine if it works as intended.
NGSS: Grades 3-5		
		Analyzing data in 3–5 builds on K–2 experiences and progresses to introducing quantitative approaches to collecting data and conducting multiple trials of qualitative observations. When possible and feasible, digital tools should be used.
		<ul style="list-style-type: none"> • Represent data in tables and/or various graphical displays (bar graphs, pictographs and/or pie charts) to reveal patterns that indicate relationships. • Analyze and interpret data to make sense of phenomena, using logical reasoning, mathematics, and/or computation. • Compare and contrast data collected by different groups in order to discuss similarities and differences in their findings. • Analyze data to refine a problem statement or the design of a proposed object, tool, or process. • Use data to evaluate and refine design solutions.

Practice 5. Using mathematics and computational thinking			
NGSS: Kindergarten - Grade 2			
Mathematical and computational thinking in K–2 builds on prior experience and progresses to recognizing that mathematics can be used to describe the natural and designed world(s).			
			<ul style="list-style-type: none"> • Decide when to use qualitative vs. quantitative data. • Use counting and numbers to identify and describe patterns in the natural and designed world(s). • Describe, measure, and/or compare quantitative attributes of different objects and display the data using simple graphs. • Use quantitative data to compare two alternative solutions to a problem.
NGSS: Grades 3-5			
Mathematical and computational thinking in 3–5 builds on K–2 experiences and progresses to extending quantitative measurements to a variety of physical properties and using computation and mathematics to analyze data and compare alternative design solutions.			
			<ul style="list-style-type: none"> • Decide if qualitative or quantitative data are best to determine whether a proposed object or tool meets criteria for success. • Organize simple data sets to reveal patterns that suggest relationships. • Describe, measure, estimate, and/or graph quantities (e.g., area, volume, weight, time) to address scientific and engineering questions and problems. • Create and/or use graphs and/or charts generated from simple algorithms to compare alternative solutions to an engineering problem.
Practice 6. Constructing explanations (for science) and designing solutions (for engineering)			
NGSS: Kindergarten - Grade 2			
Constructing explanations and designing solutions in K–2 builds on prior experiences and progresses to the use of evidence and ideas in constructing evidence-based accounts of natural phenomena and designing solutions.			
			<ul style="list-style-type: none"> • Make observations (firsthand or from media) to construct an evidence-based account for natural phenomena. • Use tools and/or materials to design and/or build a device that solves a specific problem or a solution to a specific problem. • Generate and/or compare multiple solutions to a problem.
NGSS: Grades 3-5			
Constructing explanations and designing solutions in 3–5 builds on K–2 experiences and progresses to the use of evidence in constructing explanations that specify variables that describe and predict phenomena and in designing multiple solutions to design problems.			
			<ul style="list-style-type: none"> • Construct an explanation of observed relationships (e.g., the distribution of plants in the back yard). • Use evidence (e.g., measurements, observations, patterns) to construct or support an explanation or design a solution to a problem. • Identify the evidence that supports particular points in an explanation. • Apply scientific ideas to solve design problems. • Generate and compare multiple solutions to a problem based on how well they meet the criteria and constraints of the design solution.

Practice 7. Engaging in argument from evidence	
NGSS: Kindergarten - Grade 2	
Engaging in argument from evidence in K–2 builds on prior experiences and progresses to comparing ideas and representations about the natural and designed world(s).	
	<ul style="list-style-type: none"> • Identify arguments that are supported by evidence. • Distinguish between explanations that account for all gathered evidence and those that do not. • Analyze why some evidence is relevant to a scientific question and some is not. • Distinguish between opinions and evidence in one’s own explanations. • Listen actively to arguments to indicate agreement or disagreement based on evidence, and/or to retell the main points of the argument. • Construct an argument with evidence to support a claim. • Make a claim about the effectiveness of an object, tool, or solution that is supported by relevant evidence.
NGSS: Grades 3-5	
Engaging in argument from evidence in 3–5 builds on K–2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed world(s).	
	<ul style="list-style-type: none"> • Compare and refine arguments based on an evaluation of the evidence presented. • Distinguish among facts, reasoned judgment based on research findings, and speculation in an explanation. • Respectfully provide and receive critiques from peers about a proposed procedure, explanation, or model by citing relevant evidence and posing specific questions. • Construct and/or support an argument with evidence, data, and/or a model. • Use data to evaluate claims about cause and effect. • Make a claim about the merit of a solution to a problem by citing relevant evidence about how it meets the criteria and constraints of the problem.
Practice 8. Obtaining, evaluating, and communicating information	
NGSS: Kindergarten - Grade 2	
Obtaining, evaluating, and communicating information in K–2 builds on prior experiences and uses observations and texts to communicate new information.	
	<ul style="list-style-type: none"> • Read grade-appropriate texts and/or use media to obtain scientific and/or technical information to determine patterns in and/or evidence about the natural and designed world(s). • Describe how specific images (e.g., a diagram showing how a machine works) support a scientific or engineering idea. • Obtain information using various texts, text features (e.g., headings, tables of contents, glossaries, electronic menus, icons), and other media that will be useful in answering a scientific question and/or supporting a scientific claim. • Communicate information or design ideas and/or solutions with others in oral and/or written forms using models, drawings, writing, or numbers that provide detail about scientific ideas, practices, and/or design ideas.
NGSS: Grades 3-5	
Obtaining, evaluating, and communicating information in 3–5 builds on K–2 experiences and progresses to evaluating the merit and accuracy of ideas and methods.	

		<ul style="list-style-type: none"> • Read and comprehend grade-appropriate complex texts and/or other reliable media to summarize and obtain scientific and technical ideas and describe how they are supported by evidence. • Compare and/or combine across complex texts and/or other reliable media to support the engagement in other scientific and/or engineering practices. • Combine information in written text with that contained in corresponding tables, diagrams, and/or charts to support the engagement in other scientific and/or engineering practices. <p>Obtain and combine information from books and/or other reliable media to explain phenomena or solutions to a design problem.</p> <ul style="list-style-type: none"> • Communicate scientific and/or technical information orally and/or in written formats, including various forms of media and may include tables, diagrams, and charts.
Connections to the Nature of Science: Most Closely Associated with Practices		
NGSS: Kindergarten - Grade 2		
Scientific Investigations Use a Variety of Methods		
		<ul style="list-style-type: none"> • Science investigations begin with a question. • Science uses different ways to study the world.
Scientific Investigations Use a Variety of Methods		
		<ul style="list-style-type: none"> • Science investigations begin with a question. • Science uses different ways to study the world.
Scientific Knowledge is Based on Empirical Evidence		
		<ul style="list-style-type: none"> • Scientists look for patterns and order when making observations about the world.
Scientific Knowledge is Open to Revision in Light of New Evidence		
		<ul style="list-style-type: none"> • Science knowledge can change when new information is found.
Science Models, Laws, Mechanisms, and Theories Explain Natural Phenomena		
		<ul style="list-style-type: none"> • Science uses drawings, sketches, and models as a way to communicate ideas. • Science searches for cause and effect relationships to explain natural events.
NGSS: Grades 3-5		
Scientific Investigations Use a Variety of Methods		
		<ul style="list-style-type: none"> • Science methods are determined by questions. • Science investigations use a variety of methods, tools, and techniques.
Scientific Knowledge is Based on Empirical Evidence		
		<ul style="list-style-type: none"> • Science findings are based on recognizing patterns. • Science uses tools and technologies to make accurate measurements and observations.
Scientific Knowledge is Open to Revision in Light of New Evidence		
		<ul style="list-style-type: none"> • Science explanations can change based on new evidence.
Science Models, Laws, Mechanisms, and Theories Explain Natural Phenomena		
		<ul style="list-style-type: none"> • Science theories are based on a body of evidence and many tests. • Science explanations describe the mechanisms for natural events.

Grades 6-8 Science (Middle School)

Middle School Life Science

MS-LS1

- MS-LS1-1 Conduct an investigation to provide evidence that living things are made of cells; either one cell or many different numbers and types of cells. [Clarification Statement: Emphasis is on developing evidence that living things are made of cells, distinguishing between living and non-living things, and understanding that living things may be made of one cell or many and varied cells.]
- MS-LS1-2. Develop and use a model to describe the function of a cell as a whole and ways parts of cells contribute to the function. [Clarification Statement: Emphasis is on the cell functioning as a whole system and the primary role of identified parts of the cell, specifically the nucleus, chloroplasts, mitochondria, cell membrane, and cell wall.]
- MS-LS1-3. Use argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells. [Clarification Statement: Emphasis is on the conceptual understanding that cells form tissues and tissues form organs specialized for particular body functions. Examples could include the interaction of subsystems within a system and the normal functioning of those systems.]
- MS-LS1-4. Use argument based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants respectively. [Clarification Statement: Examples of behaviors that affect the probability of animal reproduction could include nest building to protect young from cold, herding of animals to protect young from predators, and vocalization of animals and colorful plumage to attract mates for breeding. Examples of animal behaviors that affect the probability of plant reproduction could include transferring pollen or seeds; and, creating conditions for seed germination and growth. Examples of plant structures could include bright flowers attracting butterflies that transfer pollen, flower nectar and odors that attract insects that transfer pollen, and hard shells on nuts that squirrels bury.]
- MS-LS1-5. Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms. [Clarification Statement: Examples of local environmental conditions could include availability of food, light, space, and water. Examples of genetic factors could include large breed cattle and species of grass affecting growth of organisms. Examples of evidence could include drought decreasing plant growth, fertilizer increasing plant growth, different varieties of plant seeds growing at different rates in different conditions, and fish growing larger in large ponds than they do in small ponds.]
- MS-LS1-6. Construct a scientific explanation based on evidence for the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms. [Clarification Statement: Emphasis is on tracing movement of matter and flow of energy.]
- MS-LS1-7. Develop a model to describe how food is rearranged through chemical reactions forming new molecules that support growth and/or release energy as this matter moves through an organism. [Clarification Statement: Emphasis is on describing that molecules are broken apart and put back together and that in this process, energy is released.]
- MS-LS1-8. Gather and synthesize information that sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories.

MS-LS2

- MS-LS2-1. Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem. [Clarification Statement: Emphasis is on cause and effect relationships between resources and growth of individual organisms and the numbers of organisms in ecosystems during periods of abundant and scarce resources.]
- MS-LS2-2. Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems. [Clarification Statement: Emphasis is on predicting consistent patterns of interactions in different ecosystems in terms of the relationships among and between organisms and abiotic components of ecosystems. Examples of types of interactions could include competitive, predatory, and mutually beneficial.]
- MS-LS2-3. Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem. [Clarification Statement: Emphasis is on describing the conservation of matter and flow of energy into and out of various ecosystems, and on defining the boundaries of the system.]
- MS-LS2-4. Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations. [Clarification Statement: Emphasis is on recognizing patterns in data and making warranted inferences about changes in populations, and on evaluating empirical evidence supporting arguments about changes to ecosystems.]
- MS-LS2-5. Evaluate competing design solutions for maintaining biodiversity and ecosystem services. [Clarification Statement: Examples of ecosystem services could include water purification, nutrient recycling, and prevention of soil erosion. Examples of design solution constraints could include scientific, economic, and social considerations.]

MS-LS3

- MS-LS3-1. Develop and use a model to describe why structural changes to genes (mutations) located on chromosomes may affect proteins and may result in harmful, beneficial, or neutral effects to the structure and function of the organism.
[Clarification Statement: Emphasis is on conceptual understanding that changes in genetic material may result in making different proteins.]
- MS-LS3-2. Develop and use a model to describe why asexual reproduction results in offspring with identical genetic information and sexual reproduction results in offspring with genetic variation. [Clarification Statement: Emphasis is on using models such as Punnett squares, diagrams, and simulations to describe the cause and effect relationship of gene transmission from parent(s) to offspring and resulting genetic variation.]

MS-LS4

- MS-LS4-1. Analyze and interpret data for patterns in the fossil record that document the existence, diversity, extinction, and change of life forms throughout the history of life on Earth under the assumption that natural laws operate today as in the past. [Clarification Statement: Emphasis is on finding patterns of changes in the level of complexity of anatomical structures in organisms and the chronological order of fossil appearance in the rock layers.]
- MS-LS4-2. Apply scientific ideas to construct an explanation for the anatomical similarities and differences among modern organisms and between modern and fossil organisms to infer

evolutionary relationships. [Clarification Statement: Emphasis is on explanations of the evolutionary relationships among organisms in terms of similarity or differences of the gross appearance of anatomical structures.]

- MS-LS4-3. Analyze displays of pictorial data to compare patterns of similarities in the embryological development across multiple species to identify relationships not evident in the fully formed anatomy. [Clarification Statement: Emphasis is on inferring general patterns of relatedness among embryos of different organisms by comparing the macroscopic appearance of diagrams or pictures.]
- MS-LS4-4. Construct an explanation based on evidence that describes how genetic variations of traits in a population increase some individuals' probability of surviving and reproducing in a specific environment. [Clarification Statement: Emphasis is on using simple probability statements and proportional reasoning to construct explanations.]
- MS-LS4-5. Gather and synthesize information about technologies that have changed the way humans influence the inheritance of desired traits in organisms. [Clarification Statement: Emphasis is on synthesizing information from reliable sources about the influence of humans on genetic outcomes in artificial selection (such as genetic modification, animal husbandry, gene therapy); and, on the impacts these technologies have on society as well as the technologies leading to these scientific discoveries.]
- MS-LS4-6. Use mathematical representations to support explanations of how natural selection may lead to increases and decreases of specific traits in populations over time. [Clarification Statement: Emphasis is on using mathematical models, probability statements, and proportional reasoning to support explanations of trends in changes to populations over time.]

Middle School Earth and Space Science

MS-ESS1

- MS-ESS1-1. Develop and use a model of the Earth-sun-moon system to describe the cyclic patterns of lunar phases, eclipses of the sun and moon, and seasons. [Clarification Statement: Examples of models can be physical, graphical, or conceptual.]
- MS-ESS1-2. Develop and use a model to describe the role of gravity in the motions within galaxies and the solar system. [Clarification Statement: Emphasis for the model is on gravity as the force that holds together the solar system and Milky Way galaxy and controls orbital motions within them. Examples of models can be physical (such as the analogy of distance along a football field or computer visualizations of elliptical orbits) or conceptual (such as mathematical proportions relative to the size of familiar objects such as students' school or state).]
- MS-ESS1-3. Analyze and interpret data to determine scale properties of objects in the solar system. [Clarification Statement: Emphasis is on the analysis of data from Earth-based instruments, space-based telescopes, and spacecraft to determine similarities and differences among solar system objects. Examples of scale properties include the sizes of an object's layers (such as crust and atmosphere), surface features (such as volcanoes), and orbital radius. Examples of data include statistical information, drawings and photographs, and models.]
- MS-ESS1-4. Construct a scientific explanation based on evidence from rock strata for how the geologic time scale is used to organize Earth's 4.6-billion-year-old history. [Clarification Statement: Emphasis is on how analyses of rock formations and the fossils they contain are used to establish relative ages of major events in Earth's history. Examples of Earth's major events could range from being very recent (such as the last Ice Age or the earliest fossils of

homo sapiens) to very old (such as the formation of Earth or the earliest evidence of life). Examples can include the formation of mountain chains and ocean basins, the evolution or extinction of particular living organisms, or significant volcanic eruptions.]

MS-ESS2

- MS-ESS2-1. Develop a model to describe the cycling of Earth’s materials and the flow of energy that drives this process. [Clarification Statement: Emphasis is on the processes of melting, crystallization, weathering, deformation, and sedimentation, which act together to form minerals and rocks through the cycling of Earth’s materials.]
- MS-ESS2-2. Construct an explanation based on evidence for how geoscience processes have changed Earth’s surface at varying time and spatial scales. [Clarification Statement: Emphasis is on how processes change Earth’s surface at time and spatial scales that can be large (such as slow plate motions or the uplift of large mountain ranges) or small (such as rapid landslides or microscopic geochemical reactions), and how many geoscience processes (such as earthquakes, volcanoes, and meteor impacts) usually behave gradually but are punctuated by catastrophic events. Examples of geoscience processes include surface weathering and deposition by the movements of water, ice, and wind. Emphasis is on geoscience processes that shape local geographic features, where appropriate.]
- MS-ESS2-3. Analyze and interpret data on the distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence of the past plate motions. [Clarification Statement: Examples of data include similarities of rock and fossil types on different continents, the shapes of the continents (including continental shelves), and the locations of ocean structures (such as ridges, fracture zones, and trenches).]
- MS-ESS2-4. Develop a model to describe the cycling of water through Earth’s systems driven by energy from the sun and the force of gravity. [Clarification Statement: Emphasis is on the ways water changes its state as it moves through the multiple pathways of the hydrologic cycle. Examples of models can be conceptual or physical.]
- MS-ESS2-5. Collect data to provide evidence for how the motions and complex interactions of air masses result in changes in weather conditions. [Clarification Statement: Emphasis is on how air masses flow from regions of high pressure to low pressure, causing weather (defined by temperature, pressure, humidity, precipitation, and wind) at a fixed location to change over time, and how sudden changes in weather can result when different air masses collide. Emphasis is on how weather can be predicted within probabilistic ranges. Examples of data can be provided to students (such as weather maps, diagrams, and visualizations) or obtained through laboratory experiments (such as with condensation).]
- MS-ESS2-6. Develop and use a model to describe how unequal heating and rotation of the Earth cause patterns of atmospheric and oceanic circulation that determine regional climates. [Clarification Statement: Emphasis is on how patterns vary by latitude, altitude, and geographic land distribution. Emphasis of atmospheric circulation is on the sunlight-driven latitudinal banding, the Coriolis effect, and resulting prevailing winds; emphasis of ocean circulation is on the transfer of heat by the global ocean convection cycle, which is constrained by the Coriolis effect and the outlines of continents. Examples of models can be diagrams, maps and globes, or digital representations.]

MS-ESS3

-
- MS-ESS3-1. Construct a scientific explanation based on evidence for how the uneven distributions of Earth’s mineral, energy, and groundwater resources are the result of past and current geoscience processes.
 - [Clarification Statement: Emphasis is on how these resources are limited and typically non-renewable, and how their distributions are significantly changing as a result of removal by humans. Examples of uneven distributions of resources as a result of past processes include but are not limited to petroleum (locations of the burial of organic marine sediments and subsequent geologic traps), metal ores (locations of past volcanic and hydrothermal activity associated with subduction zones), and soil (locations of active weathering and/or deposition of rock).]
 - MS-ESS3-2. Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects. [Clarification Statement: Emphasis is on how some natural hazards, such as volcanic eruptions and severe weather, are preceded by phenomena that allow for reliable predictions, but others, such as earthquakes, occur suddenly and with no notice, and thus are not yet predictable. Examples of natural hazards can be taken from interior processes (such as earthquakes and volcanic eruptions), surface processes (such as mass wasting and tsunamis), or severe weather events (such as hurricanes, tornadoes, and floods). Examples of data can include the locations, magnitudes, and frequencies of the natural hazards. Examples of technologies can be global (such as satellite systems to monitor hurricanes or forest fires) or local (such as building basements in tornado prone regions or reservoirs to mitigate droughts).]
 - MS-ESS3-3. Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment. [Clarification Statement: Examples of the design process include examining human environmental impacts, assessing the kinds of solutions that are feasible, and designing and evaluating solutions that could reduce that impact. Examples of human impacts can include water usage (such as the withdrawal of water from streams and aquifers or the construction of dams and levees), land usage (such as urban development, agriculture, or the removal of wetlands), and pollution (such as of the air, water, or land).]
 - MS-ESS3-4. Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth’s systems.
 - [Clarification Statement: Examples of evidence include grade-appropriate databases on human populations and the rates of consumption of food and natural resources (such as freshwater, mineral, and energy). Examples of impacts can include changes to the appearance, composition, and structure of Earth’s systems as well as the rates at which they change. The consequences of increases in human populations and consumption of natural resources are described by science, but science does not make the decisions for the actions society takes.]
 - MS-ESS3-5. Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century. [Clarification Statement: Examples of factors include human activities (such as fossil fuel combustion, cement production, and agricultural activity) and natural processes (such as changes in incoming solar radiation or volcanic activity). Examples of evidence can include tables, graphs, and maps of global and regional temperatures, atmospheric levels of gases such as carbon dioxide and methane, and the rates of human activities. Emphasis is on the major role that human activities play in causing the rise in global temperatures.]

Middle School Physical Science

MS-PS1

- MS-PS1-1. Develop models to describe the atomic composition of simple molecules and extended structures. [Clarification Statement: Emphasis is on developing models of molecules that vary in complexity. Examples of simple molecules could include ammonia and methanol. Examples of extended structures could include sodium chloride or diamonds. Examples of molecular-level models could include drawings, 3D ball and stick structures, or computer representations showing different molecules with different types of atoms.]
- MS-PS1-2. Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred. [Clarification Statement: Examples of reactions could include burning sugar or steel wool, fat reacting with sodium hydroxide, and mixing zinc with hydrogen chloride.]
- MS-PS1-3. Gather and make sense of information to describe that synthetic materials come from natural resources and impact society. [Clarification Statement: Emphasis is on natural resources that undergo a chemical process to form the synthetic material. Examples of new materials could include new medicine, foods, and alternative fuels.]
- MS-PS1-4. Develop a model that predicts and describes changes in particle motion, temperature, and state of a pure substance when thermal energy is added or removed. [Clarification Statement: Emphasis is on qualitative molecular-level models of solids, liquids, and gases to show that adding or removing thermal energy increases or decreases kinetic energy of the particles until a change of state occurs. Examples of models could include drawings and diagrams. Examples of particles could include molecules or inert atoms. Examples of pure substances could include water, carbon dioxide, and helium.]
- MS-PS1-5. Develop and use a model to describe how the total number of atoms does not change in a chemical reaction and thus mass is conserved. [Clarification Statement: Emphasis is on law of conservation of matter and on physical models or drawings, including digital forms, that represent atoms.]
- MS-PS1-6. Undertake a design project to construct, test, and modify a device that either releases or absorbs thermal energy by chemical processes. [Clarification Statement: Emphasis is on the design, controlling the transfer of energy to the environment, and modification of a device using factors such as type and concentration of a substance. Examples of designs could involve chemical reactions such as dissolving ammonium chloride or calcium chloride.]

MS-PS2

- MS-PS2-1. Apply Newton's Third Law to design a solution to a problem involving the motion of two colliding objects. [Clarification Statement: Examples of practical problems could include the impact of collisions between two cars, between a car and stationary objects, and between a meteor and a space vehicle.]
- MS-PS2-2. Plan an investigation to provide evidence that the change in an object's motion depends on the sum of the forces on the object and the mass of the object. [Clarification Statement: Emphasis is on balanced (Newton's First Law) and unbalanced forces in a system, qualitative comparisons of forces, mass and changes in motion (Newton's Second Law), frame of reference, and specification of units.]
- MS-PS2-3. Ask questions about data to determine the factors that affect the strength of electric and magnetic forces. [Clarification Statement: Examples of devices that use electric and magnetic forces could include electromagnets, electric motors, or generators. Examples of data

could include the effect of the number of turns of wire on the strength of an electromagnet, or the effect of increasing the number or strength of magnets on the speed of an electric motor.]

- MS-PS2-4. Construct and present arguments using evidence to support the claim that gravitational interactions are attractive and depend on the masses of interacting objects. [Clarification Statement: Examples of evidence for arguments could include data generated from simulations or digital tools; and charts displaying mass, strength of interaction, distance from the Sun, and orbital periods of objects within the solar system.]
- MS-PS2-5. Conduct an investigation and evaluate the experimental design to provide evidence that fields exist between objects exerting forces on each other even though the objects are not in contact. [Clarification Statement: Examples of this phenomenon could include the interactions of magnets, electrically-charged strips of tape, and electrically-charged pith balls. Examples of investigations could include first-hand experiences or simulations.]

MS-PS3

- MS-PS3-1. Construct and interpret graphical displays of data to describe the relationships of kinetic energy to the mass of an object and to the speed of an object. [Clarification Statement: Emphasis is on descriptive relationships between kinetic energy and mass separately from kinetic energy and speed. Examples could include riding a bicycle at different speeds, rolling different sizes of rocks downhill, and getting hit by a wiffle ball versus a tennis ball.]
- MS-PS3-2. Develop a model to describe that when the arrangement of objects interacting at a distance changes, different amounts of potential energy are stored in the system.
- [Clarification Statement: Emphasis is on relative amounts of potential energy, not on calculations of potential energy. Examples of objects within systems interacting at varying distances could include: the Earth and either a roller coaster cart at varying positions on a hill or objects at varying heights on shelves, changing the direction/orientation of a magnet, and a balloon with static electrical charge being brought closer to a classmate's hair. Examples of models could include representations, diagrams, pictures, and written descriptions of systems.]
- MS-PS3-3. Apply scientific principles to design, construct, and test a device that either minimizes or maximizes thermal energy transfer. [Clarification Statement: Examples of devices could include an insulated box, a solar cooker, and a Styrofoam cup.]
- MS-PS3-4. Plan an investigation to determine the relationships among the energy transferred, the type of matter, the mass, and the change in the average kinetic energy of the particles as measured by the temperature of the sample. [Clarification Statement: Examples of experiments could include comparing final water temperatures after different masses of ice melted in the same volume of water with the same initial temperature, the temperature change of samples of different materials with the same mass as they cool or heat in the environment, or the same material with different masses when a specific amount of energy is added.]
- MS-PS3-5. Construct, use, and present arguments to support the claim that when the kinetic energy of an object changes, energy is transferred to or from the object. [Clarification Statement: Examples of empirical evidence used in arguments could include an inventory or other representation of the energy before and after the transfer in the form of temperature changes or motion of object.]

MS-PS4

-
- MS-PS4-1. Use mathematical representations to describe a simple model for waves that includes how the amplitude of a wave is related to the energy in a wave. [Clarification Statement: Emphasis is on describing waves with both qualitative and quantitative thinking.]
 - MS-PS4-2. Develop and use a model to describe that waves are reflected, absorbed, or transmitted through various materials. [Clarification Statement: Emphasis is on both light and mechanical waves. Examples of models could include drawings, simulations, and written descriptions.]
 - MS-PS4-3. Integrate qualitative scientific and technical information to support the claim that digitized signals are a more reliable way to encode and transmit information than analog signals. [Clarification Statement: Emphasis is on a basic understanding that waves can be used for communication purposes. Examples could include using fiber optic cable to transmit light pulses, radio wave pulses in wifi devices, and conversion of stored binary patterns to make sound or text on a computer screen.]

HS Physical Science Grades 9-12

HS-PS1

- HS-PS1-1. Use the periodic table as a model to predict the relative properties of elements based on the patterns of electrons in the outermost energy level of atoms. [Clarification Statement: Examples of properties that could be predicted from patterns could include reactivity of metals, types of bonds formed, numbers of bonds formed, and reactions with oxygen.]
- HS-PS1-2. Construct and revise an explanation for the outcome of a simple chemical reaction based on the outermost electron states of atoms, trends in the periodic table, and knowledge of the patterns of chemical properties. [Clarification Statement: Examples of chemical reactions could include the reaction of sodium and chlorine, of carbon and oxygen, or of carbon and hydrogen.]
- HS-PS1-3. Plan and conduct an investigation to gather evidence to compare the structure of substances at the bulk scale to infer the strength of electrical forces between particles. [Clarification Statement: Emphasis is on understanding the strengths of forces between particles, not on naming specific intermolecular forces (such as dipole-dipole). Examples of particles could include ions, atoms, molecules, and networked materials (such as graphite). Examples of bulk properties of substances could include the melting point and boiling point, vapor pressure, and surface tension.]
- HS-PS1-4. Develop a model to illustrate that the release or absorption of energy from a chemical reaction system depends upon the changes in total bond energy. [Clarification Statement: Emphasis is on the idea that a chemical reaction is a system that affects the energy change. Examples of models could include molecular-level drawings and diagrams of reactions, graphs showing the relative energies of reactants and products, and representations showing energy is conserved.]
- HS-PS1-5. Apply scientific principles and evidence to provide an explanation about the effects of changing the temperature or concentration of the reacting particles on the rate at which a reaction occurs. [Clarification Statement: Emphasis is on student reasoning that focuses on the number and energy of collisions between molecules.]
- HS-PS1-6. Refine the design of a chemical system by specifying a change in conditions that would produce increased amounts of products at equilibrium. [Clarification Statement: Emphasis is on the application of Le Chatelier's Principle and on refining designs of chemical reaction systems, including descriptions of the connection between changes made at the

-
- macroscopic level and what happens at the molecular level. Examples of designs could include different ways to increase product formation including adding reactants or removing products.]
- HS-PS1-7. Use mathematical representations to support the claim that atoms, and therefore mass, are conserved during a chemical reaction. [Clarification Statement: Emphasis is on using mathematical ideas to communicate the proportional relationships between masses of atoms in the reactants and the products, and the translation of these relationships to the macroscopic scale using the mole as the conversion from the atomic to the macroscopic scale. Emphasis is on assessing students' use of mathematical thinking and not on memorization and rote application of problem solving techniques.]
 - HS-PS1-8. Develop models to illustrate the changes in the composition of the nucleus of the atom and the energy released during the processes of fission, fusion, and radioactive decay. [Clarification Statement: Emphasis is on simple qualitative models, such as pictures or diagrams, and on the scale of energy released in nuclear processes relative to other kinds of transformations.]

HS-PS2

- HS-PS2-1. Analyze data to support the claim that Newton's second law of motion describes the mathematical relationship among the net force on a macroscopic object, its mass, and its acceleration. [Clarification Statement: Examples of data could include tables or graphs of position or velocity as a function of time for objects subject to a net unbalanced force, such as a falling object, an object sliding down a ramp, or a moving object being pulled by a constant force.]
- HS-PS2-2. Use mathematical representations to support the claim that the total momentum of a system of objects is conserved when there is no net force on the system. [Clarification Statement: Emphasis is on the quantitative conservation of momentum in interactions and the qualitative meaning of this principle.]
- HS-PS2-3. Apply scientific and engineering ideas to design, evaluate, and refine a device that minimizes the force on a macroscopic object during a collision. [Clarification Statement: Examples of evaluation and refinement could include determining the success of the device at protecting an object from damage and modifying the design to improve it. Examples of a device could include a football helmet or a parachute.]
- HS-PS2-4. Use mathematical representations of Newton's Law of Gravitation and Coulomb's Law to describe and predict the gravitational and electrostatic forces between objects. [Clarification Statement: Emphasis is on both quantitative and conceptual descriptions of gravitational and electric fields.]
- HS-PS2-5. Plan and conduct an investigation to provide evidence that an electric current can produce a magnetic field and that a changing magnetic field can produce an electric current.
- HS-PS2-6. Communicate scientific and technical information about why the molecular-level structure is important in the functioning of designed materials. [Clarification Statement: Emphasis is on the attractive and repulsive forces that determine the functioning of the material. Examples could include why electrically conductive materials are often made of metal, flexible but durable materials are made up of long chained molecules, and pharmaceuticals are designed to interact with specific receptors.]

HS-PS3

-
- HS-PS3-1. Create a computational model to calculate the change in the energy of one component in a system when the change in energy of the other component(s) and energy flows in and out of the system are known. [Clarification Statement: Emphasis is on explaining the meaning of mathematical expressions used in the model.]
 - HS-PS3-2. Develop and use models to illustrate that energy at the macroscopic scale can be accounted for as a combination of energy associated with the motion of particles (objects) and energy associated with the relative position of particles (objects). [Clarification Statement: Examples of phenomena at the macroscopic scale could include the conversion of kinetic energy to thermal energy, the energy stored due to position of an object above the earth, and the energy stored between two electrically-charged plates. Examples of models could include diagrams, drawings, descriptions, and computer simulations.]
 - HS-PS3-3. Design, build, and refine a device that works within given constraints to convert one form of energy into another form of energy. [Clarification Statement: Emphasis is on both qualitative and quantitative evaluations of devices. Examples of devices could include Rube Goldberg devices, wind turbines, solar cells, solar ovens, and generators. Examples of constraints could include use of renewable energy forms and efficiency.]
 - HS-PS3-4. Plan and conduct an investigation to provide evidence that the transfer of thermal energy when two components of different temperature are combined within a closed system results in a more uniform energy distribution among the components in the system (second law of thermodynamics). [Clarification Statement: Emphasis is on analyzing data from student investigations and using mathematical thinking to describe the energy changes both quantitatively and conceptually. Examples of investigations could include mixing liquids at different initial temperatures or adding objects at different temperatures to water.]
 - HS-PS3-5. Develop and use a model of two objects interacting through electric or magnetic fields to illustrate the forces between objects and the changes in energy of the objects due to the interaction. [Clarification Statement: Examples of models could include drawings, diagrams, and texts, such as drawings of what happens when two charges of opposite polarity are near each other.]

HS-PS4

- HS-PS4-1. Use mathematical representations to support a claim regarding relationships among the frequency, wavelength, and speed of waves traveling in various media. [Clarification Statement: Examples of data could include electromagnetic radiation traveling in a vacuum and glass, sound waves traveling through air and water, and seismic waves traveling through the earth.]
- HS-PS4-2. Evaluate questions about the advantages of using digital transmission and storage of information. [Clarification Statement: Examples of advantages could include that digital information is stable because it can be stored reliably in computer memory, transferred easily, and copied and shared rapidly. Disadvantages could include issues of easy deletion, security, and theft.]
- HS-PS4-3. Evaluate the claims, evidence, and reasoning behind the idea that electromagnetic radiation can be described either by a wave model or a particle model, and that for some situations one model is more useful than the other. [Clarification Statement: Emphasis is on how the experimental evidence supports the claim and how a theory is generally modified in light of new evidence. Examples of a phenomenon could include resonance, interference, diffraction, and photoelectric effect.]

-
- HS-PS4-4. Evaluate the validity and reliability of claims in published materials of the effects that different frequencies of electromagnetic radiation have when absorbed by matter. [Clarification Statement: Emphasis is on the idea that photons associated with different frequencies of light have different energies, and the damage to living tissue from electromagnetic radiation depends on the energy of the radiation. Examples of published materials could include trade books, magazines, web resources, videos, and other passages that may reflect bias.]
 - HS-PS4-5. Communicate technical information about how some technological devices use the principles of wave behavior and wave interactions with matter to transmit and capture information and energy. [Clarification Statement: Examples could include solar cells capturing light and converting it to electricity; medical imaging; and communications technology.]

HS Life Science

HS-LS1

- HS-LS1-1. Construct an explanation based on evidence for how the structure of DNA determines the structure of proteins, which carry out the essential functions of life through systems of specialized cells.
- HS-LS1-2. Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms. [Clarification Statement: Emphasis is on functions at the organism system level such as nutrient uptake, water delivery, and organism movement in response to neural stimuli. An example of an interacting system could be an artery depending on the proper function of elastic tissue and smooth muscle to regulate and deliver the proper amount of blood within the circulatory system.]
- HS-LS1-3. Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis. [Clarification Statement: Examples of investigations could include heart rate response to exercise, stomate response to moisture and temperature, and root development in response to water levels.]
- HS-LS1-4. Use a model to illustrate the role of cellular division (mitosis) and differentiation in producing and maintaining complex organisms.
- HS-LS1-5. Use a model to illustrate how photosynthesis transforms light energy into stored chemical energy. [Clarification Statement: Emphasis is on illustrating inputs and outputs of matter and the transfer and transformation of energy in photosynthesis by plants and other photosynthesizing organisms. Examples of models could include diagrams, chemical equations, and conceptual models.]
- HS-LS1-6. Construct and revise an explanation based on evidence for how carbon, hydrogen, and oxygen from sugar molecules may combine with other elements to form amino acids and/or other large carbon-based molecules. [Clarification Statement: Emphasis is on using evidence from models and simulations to support explanations.]
- HS-LS1-7. Use a model to illustrate that cellular respiration is a chemical process whereby the bonds of food molecules and oxygen molecules are broken and the bonds in new compounds are formed, resulting in a net transfer of energy. [Clarification Statement: Emphasis is on the conceptual understanding of the inputs and outputs of the process of cellular respiration.]

HS-LS2

-
- HS-LS2-1. Use mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales. [Clarification Statement: Emphasis is on quantitative analysis and comparison of the relationships among interdependent factors including boundaries, resources, climate, and competition. Examples of mathematical comparisons could include graphs, charts, histograms, and population changes gathered from simulations or historical data sets.]
 - HS-LS2-2. Use mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems of different scales. [Clarification Statement: Examples of mathematical representations include finding the average, determining trends, and using graphical comparisons of multiple sets of data.]
 - [Assessment Boundary: Assessment is limited to provided data.]
 - HS-LS2-3. Construct and revise an explanation based on evidence for the cycling of matter and flow of energy in aerobic and anaerobic conditions. [Clarification Statement: Emphasis is on conceptual understanding of the role of aerobic and anaerobic respiration in different environments.]
 - HS-LS2-4. Use mathematical representations to support claims for the cycling of matter and flow of energy among organisms in an ecosystem. [Clarification Statement: Emphasis is on using a mathematical model of stored energy in biomass to describe the transfer of energy from one trophic level to another and that matter and energy are conserved as matter cycles and energy flows through ecosystems. Emphasis is on atoms and molecules such as carbon, oxygen, hydrogen and nitrogen being conserved as they move through an ecosystem.]
 - HS-LS2-5. Develop a model to illustrate the role of photosynthesis and cellular respiration in the cycling of carbon among the biosphere, atmosphere, hydrosphere, and geosphere. [Clarification Statement: Examples of models could include simulations and mathematical models.]
 - HS-LS2-6. Evaluate claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem. [Clarification Statement: Examples of changes in ecosystem conditions could include modest biological or physical changes, such as moderate hunting or a seasonal flood; and extreme changes, such as volcanic eruption or sea level rise.]
 - HS-LS2-7. Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity. [Clarification Statement: Examples of human activities can include urbanization, building dams, and dissemination of invasive species.]
 - HS-LS2-8. Evaluate evidence for the role of group behavior on individual and species' chances to survive and reproduce.
 - [Clarification Statement: Emphasis is on: (1) distinguishing between group and individual behavior, (2) identifying evidence supporting the outcomes of group behavior, and (3) developing logical and reasonable arguments based on evidence. Examples of group behaviors could include flocking, schooling, herding, and cooperative behaviors such as hunting, migrating, and swarming.]

HS-LS3

- HS-LS3-1. Ask questions to clarify relationships about the role of DNA and chromosomes in coding the instructions for characteristic traits passed from parents to offspring.

-
- HS-LS3-2. Make and defend a claim based on evidence that inheritable genetic variations may result from (1) new genetic combinations through meiosis, (2) viable errors occurring during replication, and/or (3) mutations caused by environmental factors. [Clarification Statement: Emphasis is on using data to support arguments for the way variation occurs.]
 - HS-LS3-3. Apply concepts of statistics and probability to explain the variation and distribution of expressed traits in a population. [Clarification Statement: Emphasis is on the use of mathematics to describe the probability of traits as it relates to genetic and environmental factors in the expression of traits.]

HS-LS4

- HS-LS4-1. Communicate scientific information that common ancestry and biological evolution are supported by multiple lines of empirical evidence. [Clarification Statement: Emphasis is on a conceptual understanding of the role each line of evidence has relating to common ancestry and biological evolution. Examples of evidence could include similarities in DNA sequences, anatomical structures, and order of appearance of structures in embryological development.]
- HS-LS4-2. Construct an explanation based on evidence that the process of evolution primarily results from four factors: (1) the potential for a species to increase in number, (2) the heritable genetic variation of individuals in a species due to mutation and sexual reproduction, (3) competition for limited resources, and (4) the proliferation of those organisms that are better able to survive and reproduce in the environment. [Clarification Statement: Emphasis is on using evidence to explain the influence each of the four factors has on number of organisms, behaviors, morphology, or physiology in terms of ability to compete for limited resources and subsequent survival of individuals and adaptation of species. Examples of evidence could include mathematical models such as simple distribution graphs and proportional reasoning.]
- HS-LS4-3. Apply concepts of statistics and probability to support explanations that organisms with an advantageous heritable trait tend to increase in proportion to organisms lacking this trait. [Clarification Statement: Emphasis is on analyzing shifts in numerical distribution of traits and using these shifts as evidence to support explanations.]
- HS-LS4-4. Construct an explanation based on evidence for how natural selection leads to adaptation of populations. [Clarification Statement: Emphasis is on using data to provide evidence for how specific biotic and abiotic differences in ecosystems (such as ranges of seasonal temperature, long-term climate change, acidity, light, geographic barriers, or evolution of other organisms) contribute to a change in gene frequency over time, leading to adaptation of populations.]
- HS-LS4-5. Evaluate the evidence supporting claims that changes in environmental conditions may result in (1) increases in the number of individuals of some species, (2) the emergence of new species over time, and (3) the extinction of other species. [Clarification Statement: Emphasis is on determining cause and effect relationships for how changes to the environment such as deforestation, fishing, application of fertilizers, drought, flood, and the rate of change of the environment affect distribution or disappearance of traits in species.]
- HS-LS4-6. Create or revise a simulation to test a solution to mitigate adverse impacts of human activity on biodiversity. [Clarification Statement: Emphasis is on testing solutions for a proposed problem related to threatened or endangered species, or to genetic variation of organisms for multiple species.]

HS Earth and Space Science

HS-ESS1

- HS-ESS1-1. Develop a model based on evidence to illustrate the life span of the sun and the role of nuclear fusion in the sun’s core to release energy that eventually reaches Earth in the form of radiation. [Clarification Statement: Emphasis is on the energy transfer mechanisms that allow energy from nuclear fusion in the sun’s core to reach Earth. Examples of evidence for the model include observations of the masses and lifetimes of other stars, as well as the ways that the sun’s radiation varies due to sudden solar flares (“space weather”), the 11- year sunspot cycle, and non-cyclic variations over centuries.]
- HS-ESS1-2. Construct an explanation of the Big Bang theory based on astronomical evidence of light spectra, motion of distant galaxies, and composition of matter in the universe. [Clarification Statement: Emphasis is on the astronomical evidence of the red shift of light from galaxies as an indication that the universe is currently expanding, the cosmic microwave background as the remnant radiation from the Big Bang, and the observed composition of ordinary matter of the universe, primarily found in stars and interstellar gases (from the spectra of electromagnetic radiation from stars), which matches that predicted by the Big Bang theory (3/4 hydrogen and 1/4 helium).]
- HS-ESS1-3. Communicate scientific ideas about the way stars, over their life cycle, produce elements. [Clarification Statement: Emphasis is on the way nucleosynthesis, and therefore the different elements created, varies as a function of the mass of a star and the stage of its lifetime.]
- HS-ESS1-4. Use mathematical or computational representations to predict the motion of orbiting objects in the solar system. [Clarification Statement: Emphasis is on Newtonian gravitational laws governing orbital motions, which apply to human-made satellites as well as planets and moons.]
- HS-ESS1-5. Evaluate evidence of the past and current movements of continental and oceanic crust and the theory of plate tectonics to explain the ages of crustal rocks. [Clarification Statement: Emphasis is on the ability of plate tectonics to explain the ages of crustal rocks. Examples include evidence of the ages oceanic crust increasing with distance from mid-ocean ridges (a result of plate spreading) and the ages of North American continental crust decreasing with distance away from a central ancient core of the continental plate (a result of past plate interactions).]
- HS-ESS1-6. Apply scientific reasoning and evidence from ancient Earth materials, meteorites, and other planetary surfaces to construct an account of Earth’s formation and early history. [Clarification Statement: Emphasis is on using available evidence within the solar system to reconstruct the early history of Earth, which formed along with the rest of the solar system 4.6 billion years ago. Examples of evidence include the absolute ages of ancient materials (obtained by radiometric dating of meteorites, moon rocks, and Earth’s oldest minerals), the sizes and compositions of solar system objects, and the impact cratering record of planetary surfaces.]

HS-ESS2

- HS-ESS2-1. Develop a model to illustrate how Earth’s internal and surface processes operate at different spatial and temporal scales to form continental and ocean-floor features. [Clarification Statement: Emphasis is on how the appearance of land features (such as mountains, valleys, and plateaus) and sea-floor features (such as trenches, ridges, and seamounts) are a result of

both constructive forces (such as volcanism, tectonic uplift, and orogeny) and destructive mechanisms (such as weathering, mass wasting, and coastal erosion).]

- HS-ESS2-2. Analyze geoscience data to make the claim that one change to Earth’s surface can create feedbacks that cause changes to other Earth systems. [Clarification Statement: Examples should include climate feedbacks, such as how an increase in greenhouse gases causes a rise in global temperatures that melts glacial ice, which reduces the amount of sunlight reflected from Earth’s surface, increasing surface temperatures and further reducing the amount of ice. Examples could also be taken from other system interactions, such as how the loss of ground vegetation causes an increase in water runoff and soil erosion; how dammed rivers increase groundwater recharge, decrease sediment transport, and increase coastal erosion; or how the loss of wetlands causes a decrease in local humidity that further reduces the wetland extent.]
- HS-ESS2-3. Develop a model based on evidence of Earth’s interior to describe the cycling of matter by thermal convection. [Clarification Statement: Emphasis is on both a one-dimensional model of Earth, with radial layers determined by density, and a three-dimensional model, which is controlled by mantle convection and the resulting plate tectonics. Examples of evidence include maps of Earth’s three-dimensional structure obtained from seismic waves, records of the rate of change of Earth’s magnetic field (as constraints on convection in the outer core), and identification of the composition of Earth’s layers from high-pressure laboratory experiments.]
- HS-ESS2-4. Use a model to describe how variations in the flow of energy into and out of Earth’s systems result in changes in climate. [Clarification Statement: Examples of the causes of climate change differ by timescale, over 1-10 years: large volcanic eruption, ocean circulation; 10-100s of years: changes in human activity, ocean circulation, solar output; 10-100s of thousands of years: changes to Earth’s orbit and the orientation of its axis; and 10-100s of millions of years: long-term changes in atmospheric composition.]
- HS-ESS2-5. Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes. [Clarification Statement: Emphasis is on mechanical and chemical investigations with water and a variety of solid materials to provide the evidence for connections between the hydrologic cycle and system interactions commonly known as the rock cycle. Examples of mechanical investigations include stream transportation and deposition using a stream table, erosion using variations in soil moisture content, or frost wedging by the expansion of water as it freezes. Examples of chemical investigations include chemical weathering and recrystallization (by testing the solubility of different materials) or melt generation (by examining how water lowers the melting temperature of most solids).]
- HS-ESS2-6. Develop a quantitative model to describe the cycling of carbon among the hydrosphere, atmosphere, geosphere, and biosphere. [Clarification Statement: Emphasis is on modeling biogeochemical cycles that include the cycling of carbon through the ocean, atmosphere, soil, and biosphere (including humans), providing the foundation for living organisms.]
- HS-ESS2-7. Construct an argument based on evidence about the simultaneous coevolution of Earth’s systems and life on Earth. [Clarification Statement: Emphasis is on the dynamic causes, effects, and feedbacks between the biosphere and Earth’s other systems, whereby geoscience factors control the evolution of life, which in turn continuously alters Earth’s surface. Examples include how photosynthetic life altered the atmosphere through the production of oxygen, which in turn increased weathering rates and allowed for the evolution of animal life; how microbial life on land increased the formation of soil, which in turn allowed for the evolution of

land plants; or how the evolution of corals created reefs that altered patterns of erosion and deposition along coastlines and provided habitats for the evolution of new life forms.]

HS-ESS3

- HS-ESS3-1. Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity. [Clarification Statement: Examples of key natural resources include access to fresh water (such as rivers, lakes, and groundwater), regions of fertile soils such as river deltas, and high concentrations of minerals and fossil fuels. Examples of natural hazards can be from interior processes (such as volcanic eruptions and earthquakes), surface processes (such as tsunamis, mass wasting and soil erosion), and severe weather (such as hurricanes, floods, and droughts). Examples of the results of changes in climate that can affect populations or drive mass migrations include changes to sea level, regional patterns of temperature and precipitation, and the types of crops and livestock that can be raised.]
- HS-ESS3-2. Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. [Clarification Statement: Emphasis is on the conservation, recycling, and reuse of resources (such as minerals and metals) where possible, and on minimizing impacts where it is not. Examples include developing best practices for agricultural soil use, mining (for coal, tar sands, and oil shales), and pumping (for petroleum and natural gas). Science knowledge indicates what can happen in natural systems—not what should happen.]
- HS-ESS3-3. Create a computational simulation to illustrate the relationships among the management of natural resources, the sustainability of human populations, and biodiversity. [Clarification Statement: Examples of factors that affect the management of natural resources include costs of resource extraction and waste management, per-capita consumption, and the development of new technologies. Examples of factors that affect human sustainability include agricultural efficiency, levels of conservation, and urban planning.]
- HS-ESS3-4. Evaluate or refine a technological solution that reduces impacts of human activities on natural systems. [Clarification Statement: Examples of data on the impacts of human activities could include the quantities and types of pollutants released, changes to biomass and species diversity, or areal changes in land surface use (such as for urban development, agriculture and livestock, or surface mining). Examples for limiting future impacts could range from local efforts (such as reducing, reusing, and recycling resources) to large-scale geoengineering design solutions (such as altering global temperatures by making large changes to the atmosphere or ocean).]
- HS-ESS3-5. Analyze geoscience data and the results from global climate models to make an evidence-based forecast of the current rate of global or regional climate change and associated future impacts to Earth's systems. [Clarification Statement: Examples of evidence, for both data and climate model outputs, are for climate changes (such as precipitation and temperature) and their associated impacts (such as on sea level, glacial ice volumes, or atmosphere and ocean composition).]
- HS-ESS3-6. Use a computational representation to illustrate the relationships among Earth systems and how those relationships are being modified due to human activity. [Clarification Statement: Examples of Earth systems to be considered are the hydrosphere, atmosphere, cryosphere, geosphere, and/or biosphere. An example of the far-reaching impacts from a human activity is how an increase in atmospheric carbon dioxide results in an increase in

photosynthetic biomass on land and an increase in ocean acidification, with resulting impacts on sea organism health and marine populations.]



Social Studies/Individuals and Societies



A social studies education should find a balance between content and skills, between preparation for the future and relevance to and enhancement for today, and between reproducing the social order but doing so with a critical eye and, for some, a willingness to challenge it. Therefore, these principles guide the development of CI units of inquiry in Social Studies/Individuals and Societies:

1. Make connections - How does the topic of study connect to current local or world events or issues? How can we connect the content and concept with the UN Sustainable Development Goals (SDGs) and Eco-Schools themes?
2. Create powerful learning experiences - helps students become aware of and understand multiple perspectives and develop empathy for other viewpoints. To what degree is the purpose to transmit and reproduce the existing social order and to what degree is it to have students to question and challenge the existing social order?
3. Balance concepts and content - balance provides for a richer understanding of both content and concepts. To what degree is the purpose to transmit knowledge and to what degree is it to develop critical-thinking skills?
4. Designs units with the end in mind - "What should the learners take away from the experience (activity, lesson, unit)?" To what degree is learning to prepare students for the future and to what degree is it for the present (for the enhancement and satisfaction of their lives right now)?

Our CI Social Studies/Individuals and Societies standards and benchmarks include Enduring Understandings that help identify what concept and content is addressed at each grade level.

*Chadwick International Pre-K-10 Social Studies/Individuals and Societies Standards
(Adapted from AERO Social Studies)*

Standard	Big Ideas for Learning
Time, Continuity, and Change Standard 1	Students will understand patterns of change and continuity, relationships between people and events through time, and various interpretations of these relationships.
Connections and Conflict Standard 2	Students will understand the causes and effects of global interactions among societies, including examples of cooperation and conflict.
People, Places, and Environment Standard 3	Students will understand the interactions and relationship between human societies, their physical environment, and sustainability.
Culture Standard 4	Students will understand cultural and intellectual developments and interactions among and within societies.
Society and Identity Standard 5	Students will understand social systems and structures and how these influence individuals.
Governance and Citizenship Standard 6	Students will understand why societies create and adopt systems of governance and how these systems address the distribution of power, human needs, and rights.
Production, Distribution, and Consumption Standard 7	Students will understand fundamental economic principles and ways in which economies are shaped by geographic and human factors.
Science, Technology, and Society Standard 8	Students will understand how societies have influenced and been influenced by scientific and technological developments.

PERFORMANCE INDICATORS (BENCHMARKS)

Standard 1. (Time, Continuity, and Change)

Students will understand patterns of change and continuity, relationships between people and events through time, and various interpretations of these relationships.

By the end of grade 2:

- 1.2.a. Identify stories about past events, people, places or situations.
- 1.2.b. Differentiate between people, places, and events in the past, present and future.
- 1.2.c. Relate stories about past events, people, places, or situations to help our understanding of the past and present.

By the end of grade 5:

-
- 1.5.a. Explain why people in different times and places view the world differently.
 - 1.5.b. Describe changes in society (e.g., political, social, cultural).
 - 1.5.c. Identify cause and effect relationships in history.
 - 1.5.d. Identify and use primary and secondary sources to examine the past and present.

Enduring Understandings for Standard 1 in PreK-Grade 5

- The past is a broad term referring to events that happened or people who lived before now.
- The past cannot be changed.
- Knowing about the past helps us to understand the present better.
- The past is preserved in many ways, including in stories and in tales of folk heroes.

Standard 2. (Connections and Conflict)

Students will understand the causes and effects of interaction among societies, including trade, systems of international exchange, war, and diplomacy.

By the end of grade 2:

- 2.2.a. Give examples of conflict and cooperation among individuals and groups.
- 2.2.b. Identify and describe factors that contribute to cooperation and factors that may cause conflict.
- 2.2.c. Identify that some ways of dealing with disagreements work better than others.

By the end of grade 5:

- 2.5.a. Describe how wants and needs have implications beyond the self.
- 2.5.b. Explain varied causes and effects of conflict and cooperation among individuals, groups, societies and nations in the following categories: politics, economics, geography, ethnicity / race / gender, and culture.
- 2.5.c. Explain the major ways groups, societies, and nations interact with one another (e.g., trade, cultural exchanges, and international organizations).

Enduring Understandings for Standard 2 in PreK-Grade 5

1. Conflict is when people disagree and they become angry or aggressive.
2. Cooperation is when people work together.
3. Conflict occurs for many reasons, but essentially because people have different wants and needs.
4. Cooperation is when people agree that they have a common goal and they work together toward that goal.
5. People can work together in many ways

Standard 3. (Geography)

Students will understand the interactions and relationship between human societies and their physical environment.

By the end of grade 2:

- 3.2.a. Describe ways in which people depend on the physical environment.
- 3.2.b. Explain the concept of location.
- 3.2.c. Use maps and graphs, tables, and diagrams to read and display geographic information.
- 3.2.d. Locate and distinguish between landforms.
- 3.2.e. Describe the influence of landforms and geographic features on human population and cultures.
- 3.2.f. Differentiate between ways in which people from different cultures think about and adapt to the physical environment.

By the end of grade 5:

- 3.5.a. Explain and use the elements of maps and globes.

- 3.5.b. Apply appropriate resources and geographic tools to generate and interpret information about the earth.
- 3.5.c. Apply concepts such as location, distance, direction, scale, movement and region.
- 3.5.d. Describe ways that the earth’s physical and human-made features have changed over time.
- 3.5.e. Describe factors that influence locations of human populations and human migration.
- 3.5.f. Describe and explain various types and patterns of settlement and land use. 3.5.g. Identify why particular locations are used for certain activities.
- 3.5.h. Define regions by their human and physical characteristics.

Enduring Understandings for Standard 3 in PreK-Grade 5

1. People depend on their physical environment.
2. Different physical environments influence different cultures in distinct ways.
3. People adapt their physical environments in different ways.
4. Maps and globes and geographical techniques help people to understand better their physical environment.
5. Regions typically refer to areas of the globe with common physical characteristics and which are in near proximity.

Standard 4. (Culture)

Students will understand cultural and intellectual developments and interactions among societies.

By the end of grade 2:

- 4.2.a. Identify regional folk heroes, stories, or songs that have contributed to the development of a region’s cultural history. 4.2.b. Describe how people in different types of institutions and organizations (e.g. families, schools, local religious communities, clubs, etc.) interact with each other.
- 4.2.c. Describe how people from different cultures interact with the environment, such as the use of resources, shelter and transportation.
- 4.2.d. Compare and contrast social environments in different cultures.
- 4.2.e. Describe the expectations of how to act in one’s own culture and compare this with behavioral expectations of other cultures.

By the end of grade 5:

- 4.5.a. Compare and contrast cultural characteristics of different regions and people (e.g. use of environment and resources, technology, food, shelter, beliefs and customs, schooling, what-is-public versus what-is-private, etc.).
- 4.5.b. Compare and contrast the ways that different cultures meet human needs and concerns.
- 4.5.c. Explain the main ideas in folktales, legends, songs, myths and stories of heroism that describe the history and traditions of various cultures.
- 4.5.d. Describe how cultural contributions from various groups have formed a national identity.
- 4.5.e. Explain the elements of culture (language, norms, values, beliefs, etc.).
- 4.5.f. Define the elements of a belief system (creed, code of behavior, rituals, community).
- 4.5.g. Examine the principle tenets of one major world religion.
- 4.5.h. Describe advantages and disadvantages associated with cultural diversity.
- 4.5.i. Examine cultural diffusion.

Enduring Understandings for Standard 4 in PreK-Grade 5

1. Culture refers to the common language, norms, values, beliefs, and practices of a distinct people.
2. Culture and a belief system (religion) are closely related.
3. Culture satisfies basic human needs, such as a sense of belonging.
4. Peoples’ actions influence their culture; someone’s culture influences their actions.

Standard 5. (Society and Identity)

Students will understand social systems and structures and how these influence individuals.

By the end of grade 2:

- 5.2.a. Identify connections between who they are as a person and their place in the world.
- 5.2.b. Distinguish themselves as individuals from others.
- 5.2.c. Recognize that individual people are part of a group.
- 5.2.d. Recognize culturally and contextually appropriate and inappropriate social behavior and the impact of making choices about behavior.
- 5.2.e. Explain why people live in social groups (e.g. families, communities, and nation).
- 5.2.f. Identify roles and behaviors that people demonstrate when in group situations.
- 5.2.g. Identify opportunities for choice in personal identity.

By the end of grade 5:

- 5.5.a. Describe how families influence the individual.
- 5.5.b. Identify how sociological circumstances (race, ethnicity, gender, class, etc.) influence an individual's perceptions of and reactions to the world.
- 5.5.c. Compare and contrast how groups and cultures are similar and different in meeting needs and concerns of their members.
- 5.5.d. Describe the various forms of institutions (e.g., school, church, clubs, etc.) and how they influence the individual.
- 5.5.e. Identify and describe ways that ethnicity and cultures influence people's daily lives.
- 5.5.f. Identify how social systems (e.g., schools, media, religions, families) prescribe racial, ethnic, and gendered identities.
- 5.5.g. Describe socialization and opportunities for choice in personal identity.
- 5.5.h. Examine the difference between "acceptance" and "tolerance".

Enduring Understandings for Standard 5 in PreK-Grade 5

1. Every person can be described in terms of different categories such as ethnicity, gender, and class.
2. Race, ethnicity, gender, and class influence someone's perceptions of and reactions to the world.
3. In a society, various institutions shape and reinforce social structures and patterns.
4. "Socialization" is a process that teaches people how their society is structured.

Standard 6. (Government)

Students will understand why societies create and adopt systems of governance and how they address human needs, rights, responsibilities, and citizenship.

By the end of grade 2:

- 6.2.a. Identify rights and responsibilities of the individual in relation to his or her social group, including the characteristics of good citizens.
- 6.2.b. Identify sources and purposes of authority in various settings (e.g., mayor, chief, ruler, principal, and teacher).
- 6.2.c. Describe rights and responsibilities of the individual in relation to his or her social group, including the characteristics of good citizens.
- 6.2.d. Identify qualities that leaders need in order to meet their responsibilities.
- 6.2.e. Describe the impact of families and schools on their lives.
- 6.2.f. Explain rights and responsibilities of the individual in relation to his or her social group, including the characteristics of good citizens.
- 6.2.g. Explain reasons for the importance of leadership and service.

-
- 6.2.h. Identify various principles used for decision-making and problem solving (fairness, cooperation, individual responsibility, etc.).
 - 6.2.i. Describe the impact of religious institutions, government agencies, and civic groups on their lives.

By the end of grade 5:

- 6.5.a. Identify issues involving rights, roles and responsibilities of individuals in relation to broader society.
- 6.5.b. Describe how political institutions meet needs and wants of individuals and society.
- 6.5.c. Identify community leaders, local and national government officials, and world leaders.
- 6.5.d. Identify the elements of major political systems (e.g., monarchy, democracy, constitutional monarchy, dictatorship). 6.5.e. Describe the organization and major responsibilities of the various levels of governments.
- 6.5.f. Explain what citizenship is. 6.5.g. Identify and describe means by which citizens can monitor, evaluate and influence actions of their government.
- 6.5.h. Describe the roles of laws, courts of law, and judges.
- 6.5.i. Compare and contrast major political systems.
- 6.5.j. Explain different strategies to resolve conflict.

Enduring Understandings for Standard 6 in PreK-Grade 5

1. Every person has certain rights within and responsibilities to broader society.
2. Governments are major sources of power within a society.
3. Governments have different forms; all have leaders and judicial systems and most have legislatures.
4. Governments help provide stability within a country by establishing laws and by resolving conflicts.

Standard 7. (Production, Distribution, and Consumption)

Students will understand fundamental economic principles and ways in which economies are shaped by geographic and human factors.

By the end of grade 2:

- 7.2.a. Distinguish between needs and wants.
- 7.2.b. Describe roles resources play in our daily lives.
- 7.2.c. Describe how we depend upon people with specialized jobs.
- 7.2.d. Distinguish between goods and services.
- 7.2.e. Explain why people make choices about how to satisfy wants and needs.
- 7.2.f. Identify institutions that are part of economic systems.
- 7.2.g. Describe how goods and services can be exchanged.

By the end of grade 5:

- 7.5.a. Describe characteristics, locations, uses, and management of renewable and non-renewable resources.
- 7.5.b. Distinguish among human, natural, and capital resources.
- 7.5.c. Describe how changes in transportation and communication have affected trade and economic activities.
- 7.5.d. Explain and compare ways in which people satisfy their basic needs and wants through the production of goods and services.
- 7.5.e. Describe how trade affects the way people earn their living in regions of the world.
- 7.5.f. Describe changes in the division of labor from hunting and gathering societies to farming communities to urban societies.
- 7.5.g. Describe primary causes of world trade.

Enduring Understandings for Standard 7 in PreK-Grade 5

1. People have wants and needs, which differ.

2. People have limited resources and must make decisions about what to produce or buy.
3. People engage in different economic activities and trade to acquire goods and services they do not produce themselves.
4. Trade can be local or extend around the world.

Standard 8. (Science, Technology, and Society)

Students will understand how societies have influenced and been influenced by scientific developments and technological developments.

By the end of grade 2:

- 8.2.a. Distinguish between "tool" and "technique."
- 8.2.b. Describe examples in which tools and techniques have changed the lives of people.
- 8.2.c. Identify reasons and requirements for making tools and developing techniques.

By the end of grade 5:

- 8.5.a. Explain the difference between science and technology.
- 8.5.b. Examine ways in which tools and techniques make certain tasks easier.
- 8.5.c. Describe ways that tools and techniques can have both positive and negative effects.
- 8.5.d. Describe changes in scientific knowledge and technology that have affected your host country.
- 8.5.e. Describe instances in which changes in values, beliefs, and attitudes have resulted from new scientific knowledge and from technological knowledge.

Enduring understandings for Standard 8 in PreK-Grade 5

1. A tool is a material object used to make a job easier whereas a technique is a process to make a job easier.



-
2. Tools and techniques generally make our lives easier but sometimes can be used for harmful purposes or have harmful consequences.
 3. Science is a field of knowledge that allows humans to understand the physical world.

MYP Individual and Societies

MYP Grades 6-8

Standard 1 Time, Continuity, and Change By the end of grade 8

Students will understand patterns of change and continuity, relationships between people and events through time, and various interpretations of these relationships....

- 1.8.a. Apply key concepts such as chronology, causality, and conflict to identify patterns of historical change.
- 1.8.b. Apply knowledge of the past to explain current events.
- 1.8.c. Explain the causes of significant historical and current political events and issues.
- 1.8.d. Utilize primary and secondary sources in historical research.
- 1.8.e. Examine historical resources for a point of view, context, bias (including gender and race), distortion, or propaganda.
- 1.8.f. Differentiate between historical facts and historical interpretations.
- 1.8.g. Analyze multiple interpretations of an historical or current event.
- 1.8.h. Analyze quantitative data to answer questions.

Standard 2 Connections and Conflict

Students will understand the causes and effects of global interactions among societies, including examples of cooperation and conflict.

- 2.8.a. Explain forces that result in world interaction (such as those related to the environment, belief systems, economics, geography/land, ethnicity/race/gender, culture, and balance of power).
- 2.8.b. Explain how historical legacies have facilitated understanding or caused misunderstanding at both local and international levels.

-
- 2.8.c. Explain how international trade and resource distribution can influence cooperation or conflict.
 - 2.8.d. Explain tensions between local and global interests.
 - 2.8.e. Identify issues and standards related to human rights.

Standard 3 People, Places, and Environment

Students will understand the interactions and relationship between human societies, their physical environment, and sustainability.

- 3.8.a. Use appropriate data sources and tools to generate, manipulate, and interpret geographic information such as the location of, size of, and distances between places.
- 3.8.b. Describe social effects of environmental changes and crises resulting from natural phenomena.
- 3.8.c. Explain voluntary and involuntary migration and its effects on the physical and human characteristics of a place.
- 3.8.d. Evaluate conventional and alternative uses of land and water resources in the community, region and beyond.
- 3.8.e. Describe ways that human events have influenced, and been influenced by, physical and human geographic conditions in local, regional, national, and global settings.
- 3.8.f. Analyze the structure and characteristics of different populations and population patterns.
- 3.8.g. Analyze the structure and characteristics of a population over time.
- 3.8.h. Identify and explain how changes people make in the physical environment in one place can cause changes in other places.

Standard 4 Culture

Students will understand cultural and intellectual developments and interactions among and within societies.

- 4.8.a. Examine the interaction between people and the environment and understand how people both shape and are shaped by the environment that they live in.
- 4.8.b. Explain behavioral norms and taboos in different cultures.
- 4.8.c. Analyze ways that people have maintained their traditions and resisted external challenges.

-
- 4.8.d. Explain the influence different cultural or ethnic groups living in the same society have had on one another.
 - 4.8.e. Evaluate the impact of globalization on different cultures and populations.
 - 4.8.f. Examine the major religions of the world in terms of their beliefs, rituals and sacred texts.
 - 4.8.g. Analyze how a major movement in literature, music, and the visual arts influenced social values.

Standard 5 Society and Identity

Students will understand social systems and structures and how these influence individuals.

- 5.8.a. Explain how cultural attitudes, values, and beliefs influence personal behavior and the development of identity.
- 5.8.b. Describe how sociological social circumstances (race, ethnicity, gender, class, etc.) influence an individual's perceptions of historical and modern events. and reactions to the world.
- 5.8.c. Recognize the foundations of one's own and others' viewpoints.
- 5.8.d. Understand the impact of conformity, and non-conformity on individuals and groups.
- 5.8.e. Analyze the accuracies and inaccuracies of stereotyping (race, ethnicity, gender, class, etc.).
- 5.8.f. Examine how socialization influences choice in personal identity.

Standard 6 Governance and Citizenship

Students will understand why societies create and adopt systems of governance and how these systems address the distribution of power, human needs, and rights.

- 6.8.a. Explain and analyze strengths and weaknesses of various kinds of governance systems in terms of the purposes they are designed to serve.
- 6.8.b. Explain how governments acquire, use, and justify power.
- 6.8.c. Describe major issues involving rights, responsibilities, roles, and status of the individual in relation to the general welfare.
- 6.8.d. Know functions and responsibilities of government.

-
- 6.8.f. Define citizenship in terms of its legal and political status and criteria used to grant naturalized citizenship.
 - 6.8.g. Describe important documentary sources of human rights.
 - 6.8.h. Analyze effects of participation in civic and political life (boycotts, civil disobedience, etc.)
 - 6.8.j. Analyze examples of the use of various strategies to resolve conflict.

Standard 7 Production, Distribution, and Consumption

Students will understand fundamental economic principles and ways in which economies are shaped by geographic and human factors.

- 7.8.a. Describe economic effects of environmental changes and crises resulting from natural phenomena.
- 7.8.b. Explain economic reasons for voluntary migration.
- 7.8.c. Evaluate conventional and alternative uses of resources.
- 7.8.d. Describe historical and contemporary economic systems.
- 7.8.e. Explain primary causes of trade.
- 7.8.f. Describe patterns of resource distribution and use.
- 7.8.g. Explain how limited resources are allocated among competing wants and needs.

Standard 8 Science, Technology, and Society

Students will understand how societies have influenced and been influenced by scientific and technological developments.

- 8.8.a. Explain prerequisites for the adoption of a particular technology (social need, social resources, cultural attitude, etc.).
- 8.8.b. Describe the process whereby adoption of scientific knowledge and use of technologies influence cultures, the environment, economies, and balance of power.
- 8.8.c. Evaluate the need for laws and policies to govern technological applications.
- 8.8.d. Describe how technologies might have effects and uses other than those intended.

- 8.8.e. Explain the concept "pace of change."

MYP Grades 9-10

Standard 1 Time, Continuity, and Change	
By the end of Grade 10	
	Students will understand patterns of change and continuity, relationships between people and events through time, and various interpretations of these relationships....
	<ul style="list-style-type: none"> • 1.12.a. Identify and evaluate significant changes and consequences. enduring influences, and recurring patterns in time. • 1.12.c. Analyze qualitative and quantitative historical data. • 1.12.e. Analyze ideals and social movements for freedom, equality, justice, and citizenship. • 1.12.g. Evaluate the origins, purpose, value, and limitations of a variety of historical sources.
Standard 2 Connections and Conflict	
	Students will understand the causes and effects of global interactions among societies, including examples of cooperation and conflict.
	<ul style="list-style-type: none"> • 2.12.b. Analyze how cooperation and conflict among states and non-state actors (e.g., inter-governmental organizations, non-governmental organizations, transnational corporations, social/resistance movements, individuals, etc.) influence political, economic, and social conditions. • 2.12.c. Evaluate efforts to resolve conflict within and among states and non-state actors. (e.g., inter-governmental organizations, non-governmental organizations, transnational corporations, social/resistance movements, individuals, etc.). • 2.12.d. Analyze how interdependence has contributed to cooperation and conflict.
Standard 3 People, Places, and Environment	
	Students will understand the interactions and relationship between human societies, their physical environment, and sustainability.
	<ul style="list-style-type: none"> • 3.12.a. Analyze the relationships between human and physical environments and/or the impact on cultures, societies, politics, and, environments. • 3.12.b. Use models to investigate relationships between places and patterns of settlement and human interaction. • 3.12.f. Analyze geographical factors (such as natural resources, environment) that contribute to cooperation or conflict between human societies. • 3.12.g. Assess the impact of cultural diffusion (globalization) on societies in different parts of the world.
Standard 4 Culture	

	Students will understand cultural and intellectual developments and interactions among and within societies.
	<ul style="list-style-type: none"> • 4.12.a. Analyze sources and characteristics of cultural, religious, or social reform movements. • 4.12.d. Examine how certain texts came to be viewed as sacred. • 4.12.e. Examine the origins and effects of beliefs systems (also including modern science) and cultures in various contexts.
Standard 5 Society and Identity	
	Students will understand social systems and structures and how these influence individuals.
	<ul style="list-style-type: none"> • 5.12.a. Explain how perspectives (race, ethnicity, gender, class, the individual. etc.) influence an individual's perceptions of and reactions to the world. • 5.12.c. Examine why cultural definitions of marginalized identities persist and are resistant to change. • 5.12.d. Examine factors that contribute to the development of a sense of identity; including the power of individual choice. • 5.12.e. Evaluate circumstances and consequences that arise from differences between cultural norms and personal identity. • 5.12.f. Discuss the limits of socialization (internalizing the norms and ideologies of society).
Standard 6 Governance and Citizenship	
	Students will understand why societies create and adopt systems of governance and how these systems address the distribution of power, human needs, and rights.
	<ul style="list-style-type: none"> • 6.12.b. Evaluate strengths and weaknesses of various kinds of contemporary political systems and ideologies. • 6.12.c. Evaluate issues regarding distribution of powers and responsibilities within political systems. • 6.12.f. Analyze how and why political institutions distribute benefits and burdens. • 6.12.k. Examine the role of voluntary, community and non-governmental groups in society and their relationship to the functions of political organizations.
Standard 7 Production, Distribution, and Consumption	
	Students will understand fundamental economic principles and ways in which economies are shaped by geographic and human factors.
	<ul style="list-style-type: none"> • 7.12.d. Evaluate the major economic systems • 7.12.f. Explain and evaluate globalization.
Standard 8 Science, Technology, and Society	
	Students will understand how societies have influenced and been influenced by scientific and technological developments.

- 8.12.b. Describe how values, beliefs, and/or attitudes have influenced and been influenced by scientific knowledge and technological knowledge.
- 8.12.g. Examine the principal contemporary contexts of technological innovation and scientific research (commercial and military) and the implications of these contexts.
- 8.12.n. Analyze social, moral, ethical, religious, and legal issues arising from technological developments and scientific developments.

Standard 9 Psychology

Students will develop and apply an understanding of the biological, cognitive and sociocultural factors affecting mental processes and behaviour.

- 9.10.a Demonstrate knowledge and comprehension of key terms, concepts, and/or theories in psychology.
- 9.10.b Demonstrate knowledge and comprehension of the biological, cognitive, or sociocultural approaches to mental processes and behaviour.
- 9.10.c Demonstrate an ability to use examples of psychological research and psychological concepts to formulate an argument in response to a specific question.
- 9.10.d Demonstrate application and analysis of psychological theories.



Chadwick International is a Member of Eco Schools.

Eco-Schools is an international programme of the Foundation of Environmental Education (FEE) that aims to empower students to be the change our sustainable world needs by engaging them in fun, action oriented and socially responsible learning.

Each school follows a seven step change process and empowers their students to lead processes and actions wherever they can.

Over time and through commitment to the Eco-Schools Seven Step process, improvements will be seen in both the learning outcomes, attitude and behaviour of students and the local community, and ultimately the local environment. Evidence of success in these areas will

eventually lead to a school being awarded with the International Green Flag. Chadwick International was awarded an Eco Schools Green Flag in March 2019, the first school in South Korea to awarded such an award.

The Eco-Schools programme extends from kindergartens to universities and is implemented in 67 countries, involving 51,000 schools and institutions, and over 19,000,000 students. It is the largest international network of teachers and students in the world. FEE EcoCampus is the name of the programme at university level.

Visual Arts



Philosophy of Teaching Visual Arts at CI

Chadwick International Visual Arts programs deliver a diverse breadth of creative experiences, which promote critical thinking and creativity while developing skills and confidence in a variety of media, tools and techniques.

PYP Visual Art: In the Primary Years Programme, students explore the creative process through inquiry-based experiences in a student-centered environment. Our students play, plan, share, refine and develop their ideas through critical-thinking, feedback and reflection. Our students gain confidence in their creative skills and develop a willingness to make mistakes and learn from them, while understanding the role visual art has to play in the world around us.

MYP Visual Art: In the Middle Years Programme, students continue to develop through creating and presenting visual art in ways that engage and convey feelings, experiences and ideas. It is through this practice that students acquire new skills and master those skills developed in prior learning. Students have opportunities to function as artists, as well as learners of the arts.

Diploma Visual Art: The IB Diploma Programme visual arts course encourages students to challenge their own creative and cultural expectations and boundaries. It is a thought-provoking course in which students develop analytical skills in problem-solving and divergent thinking, while working towards technical proficiency and confidence as art-makers.

The objectives of the CI Visual Arts program are outlined below. They have been adapted from American Education Reaches Out (AERO) Visual Arts standards and benchmarks in conjunction with IB aims and objectives for the study of Visual Arts in the three IB programs noted above.

Standard 1: Knowledge and Understanding

Through the study of theorists and practitioners of the arts, students discover the aesthetics of art forms and are able to analyze and communicate in specialized language. Using explicit and tacit knowledge alongside an understanding of the role of the arts in a global context, students inform their work and artistic perspectives.

Grade Level	AERO 1.2 Understand and use the language of art: the elements of art and principles of design.	AERO 2.1 Understand how history and culture have influenced art	AERO 2.2 Understand how art has influenced and defined history and culture	AERO 3.1 Describe artworks using the language of art	AERO 3.2 Interpret artworks using the language of art.
Pk	AERO1.2.a. Explore elements of art		AERO 2.2.a. Explore art that is used in cultural celebrations	AERO 3.1.b. Exposure to basic art concepts and vocabulary.	

K	AERO 1.2.a. Explore elements of art		AERO 2.2.a. Explore art that is used in cultural celebrations	AERO 3.1.b. Exposure to basic art concepts and vocabulary.	AERO 3.2.a. Communicate ideas and feelings through art
1	AERO 1.2.a. Identify the elements of art and begin to apply principles of design.	AERO 2.1.a. Recognize that all cultures produce art		AERO 3.1.a. Use the senses to make observations about works of art	AERO 3.2.a. Communicate ideas and feelings about works of art
2	AERO 1.2.a. Identify the elements of art and begin to apply principles of design.	AERO 2.1.b. Understand that art transcends time		AERO 3.1.b. Use basic art concepts and vocabulary when making observations.	AERO 3.2.b. Use basic art concepts and vocabulary when communicating ideas and feelings about work
3	AERO 1.2.a. Begin to manipulate the elements of art and the principles of design to create art.	AERO 2.1.a. Recognize that all cultures produce art		AERO 3.1.b. Use basic art concepts and vocabulary to compare and contrast works of art	AERO 3.2.a. Communicate ideas and feelings about works of art
4	AERO 1.2.a. Manipulate the elements of art and the principles of design to create art.	AERO 2.1.a. Relate works of art to a particular time period		AERO 3.1.a. Use the basic vocabulary of art to compare and contrast works of art	AERO 3.2.a. Begin to communicate and support interpretations of works of art

5	<p>AERO 1.2.a. Manipulate the elements of art and the principles of design to create art.</p> <p>a. Begin to purposefully apply the elements of art express an intended idea.</p>	<p>AERO 2.1.a. Relate works of art to a particular time period</p> <p>AERO 2.1.b. Begin to understand that culture and historical events influence art</p>		<p>AERO 3.1.a. Use the vocabulary of art to compare and contrast works of art</p>	<p>AERO 3.2.a. Begin to communicate and support interpretations of works of art</p>
6	<p>AERO 1.2.a. Purposefully apply the elements of art express an intended idea.</p>	<p>AERO 2.1.a. Relate works of art to a particular time period</p> <p>AERO 2.1.b. Begin to understand that culture and historical events influence art</p>	<p>AERO 2.2.a. Recognize that art objects, motifs, and styles define cultural identity.</p>	<p>AERO 3.1.a. Use the vocabulary of art to describe, explain, and classify the information in works of art</p>	<p>AERO 3.2.a. Ask relevant questions about works of art.</p> <p>AERO 3.2.b. Analyze and communicate well-supported interpretations of artwork, showing an informed point of view</p>
7	<p>AERO 1.2.a. Purposefully apply the elements of art and principles of design to express an intended idea.</p>	<p>AERO 2.1.a. Relate works of art to a particular time period</p> <p>AERO 2.1.b. Begin to understand that culture and historical events influence art</p>	<p>AERO 2.2.b. Identify examples and discuss how visual art is used to shape people’s ideas and opinions</p>	<p>AERO 3.1.a. Use the vocabulary of art to describe, explain, and classify the information in works of art</p>	<p>AERO 3.2.a. Ask relevant questions about works of art.</p> <p>AERO 3.2.b. Analyze and communicate well-supported interpretations of artwork, showing an informed point of view</p>

8	AERO 1.2.a. Purposefully apply the elements of art and principles of design to express an intended idea.	AERO 2.1.a. Identify artists and artistic movements within a specific time period. AERO 2.1.b. Compare and contrast artworks from different cultures and historical periods	AERO 2.2.a. Identify the influences of art and artists on cultural and historical events. AERO 2.2.b. Identify examples and discuss how visual art is used to shape people's ideas and opinions	AERO 3.1.a. Use the vocabulary of art to describe, explain, and classify the information in works of art	AERO 3.2.a. Ask relevant questions about works of art. AERO 3.2.b. Analyze and communicate well-supported interpretations of artwork, showing an informed point of view
9	AERO 1.2.a. Demonstrate capacity in the use of the elements of art and principles of design with a variety of media and techniques AERO 1.2.b. Apply the elements of art and principles of design in capacity and original ways to convey personal meaning	AERO 2.1.a. Critically study the context and function of specific art objects, artists, and art movements within varied cultures, times, and places AERO 2.1.b. Identify that the roles of artists have changed over time and throughout cultures	AERO 2.2.a. Comprise how societies throughout history have used imagery to define and promote political, social, and cultural agendas AERO 2.2.b. Comprise the persuasive power images have in shaping/reinforcing the culture/ society's identity AERO 2.2.c. Comprise how commercial and media images shape contemporary and traditional cultures	AERO 3.1.a. Use knowledgeable art vocabulary to articulate how the elements of art and principles of design communicate relationships within works of art	AERO 3.2.a. Pose well informed and challenging questions about artwork AERO 3.2.b. Communicate meaning of artworks, supported by an understanding of the artist's purpose AERO 3.2.c. works of art, taking into consideration an artist's purpose and the historic and social context of the work AERO 3.2.d. Demonstrate a well informed curiosity that challenges conventional interpretations of works of art



<p>10</p>	<p>AERO 1.2.a. Demonstrate ability in the use of the elements of art and principles of design with a variety of media and techniques AERO 1.2.b. Apply the elements of art and principles of design in observant and original ways to convey personal meaning</p>	<p>AERO 2.1.a. Critically investigate the context and function of specific art objects, artists, and art movements within varied cultures, times, and places AERO 2.1.b. Recognize that the roles of artists have changed over time and throughout cultures</p>	<p>AERO 2.2.a. Comprehend how societies throughout history have used imagery to define and promote political, social, and cultural agendas AERO 2.2.b. Comprehend the persuasive power images have in shaping/reinforcing the culture/society's identity AERO 2.2.c. Comprehend how commercial and media images shape contemporary and traditional cultures</p>	<p>AERO 3.1.a. Use accepted art vocabulary to articulate how the elements of art and principles of design communicate relationships within works of art</p>	<p>AERO 3.2.a. Pose learned and challenging questions about artwork AERO 3.2.b. Communicate meaning of artworks, supported by an understanding of the artist's purpose AERO 3.2.c. works of art, taking into consideration an artist's purpose and the historic and social context of the work AERO 3.2.d. Demonstrate a learned curiosity that challenges conventional interpretations of works of art</p>
------------------	---	---	---	---	---

<p>11</p>	<p>AERO 1.2.a. Demonstrate competency in the use of the elements of art and principles of design with a variety of media and techniques AERO 1.2.b. Apply the elements of art and principles of design in attentive and original ways to convey personal meaning</p>	<p>AERO 2.1.a. Critically examine the context and function of specific art objects, artists, and art movements within varied cultures, times, and places AERO 2.1.b. Understand that the roles of artists have changed over time and throughout cultures</p>	<p>AERO 2.2.a. Appreciate how societies throughout history have used imagery to define and promote political, social, and cultural agendas AERO 2.2.b. Appreciate the persuasive power images have in shaping/reinforcing the culture/society's identity AERO 2.2.c. Appreciate how commercial and media images shape contemporary and traditional cultures</p>	<p>AERO 3.1.a. Use proper art vocabulary to articulate how the elements of art and principles of design communicate relationships within works of art</p>	<p>AERO 3.2.a. Pose knowledgeable and challenging questions about artwork AERO 3.2.b. Communicate meaning of artworks, supported by an understanding of the artist's purpose AERO 3.2.c. works of art, taking into consideration an artist's purpose and the historic and social context of the work AERO 3.2.d. Demonstrate an knowledgeable curiosity that challenges conventional interpretations of works of art</p>
------------------	--	--	---	---	--

12	<p>AERO 1.2.a. Demonstrate proficiency in the use of the elements of art and principles of design with a variety of media and techniques</p> <p>AERO 1.2.b. Apply the elements of art and principles of design in thoughtful and inventive ways to convey personal meaning</p>	<p>AERO 2.1.a. Critically analyze the context and function of specific art objects, artists, and art movements within varied cultures, times, and places</p> <p>AERO 2.1.b. Know that the roles of artists have changed over time and throughout cultures</p>	<p>AERO 2.2.a. Understand how societies throughout history have used imagery to define and promote political, social, and cultural agendas</p> <p>AERO 2.2.b. Understand the persuasive power images have in shaping/reinforcing the culture/society's identity</p> <p>AERO 2.2.c. Understand how commercial and media images shape contemporary and traditional cultures</p>	<p>AERO 3.1.a. Use appropriate art vocabulary to articulate how the elements of art and principles of design communicate relationships within works of art</p>	<p>AERO 3.2.a. Pose informed and challenging questions about artwork</p> <p>AERO 3.2.b. Communicate interpretations of artworks, supported by an understanding of the artist's purpose</p> <p>AERO 3.2.c. works of art, taking into consideration an artist's purpose and the historic and social context of the work</p> <p>AERO 3.2.d. Demonstrate an informed curiosity that challenges conventional interpretations of works of art</p>
----	--	---	---	--	---

Standard 2: Developing Skills

The acquisition and development of skills provide the opportunity for active participation in the art form and in the process of creating art. Skill application allows students to develop their artistic ideas to a point of realization. The point of realization could take many forms. However, it is recognized as the moment when the student makes a final commitment to his or her artwork by presenting it to an audience. Skills are evident in both process and product.

Grade Level	1.4 Develop skills and craftsmanship with material, tools, and techniques
PK	AERO 1.4.a. experiment with materials and techniques to produce a range of artwork

K	AERO 1.4.a. Purposefully experiment with materials and techniques to produce a range of artwork
1	AERO 1.4.a. Purposefully experiment with materials and techniques to produce a range of artwork
2	AERO 1.4.a. Purposefully experiment with materials and techniques to produce a range of artwork
3	AERO 1.4.a. Purposefully experiment with materials and techniques to produce a range of artwork AERO 1.4.a. Begin to demonstrate confidence and skill in a variety of materials and techniques to create art
4	AERO 1.4.a. Demonstrate confidence and skill in a variety of materials and techniques to create art
5	AERO 1.4.a. Demonstrate confidence and skill in a variety of materials and techniques to create art Phase 4 -utilize a broad range of ways to make meaning
6	AERO 1.4.a. Demonstrate confidence and skill in a variety of materials and techniques to create art
7	AERO 1.4.a. Create works of art that reflect the refinement of technique and confidence in execution
8	AERO 1.4.a. Create works of art that reflect the refinement of technique and confidence in execution AERO 1.4.b. Knowingly select tools, techniques, and processes that best represent subject, theme and concepts.
9	AERO 1.4.a. Use tools, techniques and processes competently AERO 1.4.b. Knowingly select tools, techniques, and processes that best represent subject, theme and concepts.
10	AERO 1.4.a. Use tools, techniques and processes competently b. Knowingly select tools, techniques, and processes that best represent subject, theme and concepts.
11	AERO 1.4.a. Use tools, techniques and processes efficiently b. Deliberately select tools, techniques, and processes that best represent subject, theme and concepts.
12	AERO 1.4.a. Use tools, techniques and processes proficiently b. Purposefully select tools, techniques, and processes that best represent subject, theme and concepts.

Standard 3: Thinking Creatively

The arts motivate students to develop curiosity and purposefully explore and challenge boundaries. Thinking creatively encourages students to explore the unfamiliar and experiment in innovative ways to develop their artistic intentions, their processes, and their work. Thinking creatively enables students to discover their personal signature and realize their artistic identity.

Grade Level	1.1 Use the creative process to plan, organize and problem solve	1.3 Apply visual awareness to the creative process
PK	AERO 1.1.a. Beginning to use observations and experiences, both spontaneously and deliberately, to create art.	AERO 1.3.a. Beginning to create art that reflects personal observation and experience.
K	AERO 1.1.a. Beginning to use observations and experiences, both spontaneously and deliberately, to plan and create art.	AERO 1.3.a. Create art that reflects personal observation and experience.
1	AERO 1.1.a. Use observations and experiences, both spontaneously and deliberately, to plan and create art.	AERO 1.3.a. Create art that reflects personal observation and experience.
2	AERO 1.1.a. Use observations and experiences, both spontaneously and deliberately, to plan and create art. IBPYP Creating (Phase 2) -identify, plan, and make specific choices of materials, tools and processes	AERO 1.3.a. Create art that reflects personal observation and experience.
3	AERO 1.1.a. Use observations and experiences, both spontaneously and deliberately, to plan and create art with confidence. IB PYP Creating (Phase 2) -identify, plan, and make specific choices of materials, tools and processes -combine a variety of formal elements to communicate ideas, feelings and/or experiences	AERO 1.3.a. Create art that reflects personal observation and experience with confidence.
4	AERO 1.1.a. Begin to self assess choices and adjustments when planning and creating art. IB PYP Creating (Phase 3) -use a personal interest, belief, or value as the starting point to create a piece of artwork -use a range of strategies to solve problems during the creative process	AERO 1.3.a. Begin to create art through purposeful observation that reflects introspection.

5	<p>AERO 1.1.a. Self assess choices and adjustments when planning and creating art.</p> <p>IB PYP Creating (Phase 4) -</p> <ul style="list-style-type: none"> -adjust and refine their creative process in response to constructive criticism -utilize a broad range of ways to make meaning -select, research and develop an idea or theme for an artwork -develop an awareness of their personal preference 	<p>AERO 1.3.a. Create art through purposeful observation that reflects introspection.</p>
6	<p>AERO 1.1.a. Reflect upon and revise various plans to organize ideas and materials and apply deliberate approaches in creating art</p>	<p>AERO 1.3.a. Use personal interpretation of observations to create art</p> <p>AERO 1.3.b. Use a variety of media, innovative combinations, and subjects.</p>
7	<p>AERO 1.1.a. Reflect upon and revise various plans to organize ideas and materials and apply deliberate approaches in creating art</p>	<p>AERO 1.3.a. Use personal interpretation of observations to create art</p> <p>AER) 1.3.b. Use a variety of media, innovative combinations, and subjects.</p>
8	<p>AERO 1.1.a. Reflect upon and revise various plans to organize ideas and materials and apply deliberate approaches in creating art</p>	<p>AERO 1.3.a. Use personal interpretation of observations to create art</p> <p>AERO 1.3.b. Use a variety of media, innovative combinations, and subjects.</p>
9	<p>AERO 1.1.a. Follow a standardized investigation of formal and conceptual issues when creating art and building a portfolio.</p>	<p>IB PYP Create art that informs evidence of refined observation to transform and represent external and affective themes.</p>
10	<p>AERO 1.1.a. Follow a methodical investigation of formal and conceptual issues when creating art and building a portfolio.</p>	<p>IB PYP Create art that documents evidence of refined observation to transform and represent external and affective themes.</p>
11	<p>AERO 1.1.a. Follow an organized investigation of formal and conceptual issues when creating art and building a portfolio.</p>	<p>IB PYP Create art that indicates evidence of refined observation to transform and represent external and affective themes.</p>
12	<p>AERO 1.1.a. Follow a precise investigation of formal and conceptual issues when creating art and building a portfolio.</p>	<p>AERO 1.3.a. Create art that confirms evidence of refined observation to transform and represent external and affective themes.</p>

Standard 4: Responding

Students should have the opportunity to respond to their world, to their own art and to the art of others. A response can come in many forms; creating art as a response encourages students to make connections and transfer their learning to new settings. Through reflecting on their artistic intention and the impact of their work on an audience and on themselves, students become more aware of their own artistic development and the role that arts play in their lives and in the world. Students learn that the arts may initiate change as well as being a response to change.

Grade Level	3.3 Judge and evaluate using the language of art	4,1 Make connections to other curricular areas	4,2 Make connections between visual art and the performing arts	4.3 Make personal connections with visual art	4.4 Make connections between the study of art and art careers	X.y Look back and reflect on your own artwork and process of your artwork
PK		AERO 4.1.a. Explore art concepts that cross disciplines (e.g., pattern, shape, scale, form, balance, repetition, rhythm)	AERO 4.2.a. Begin to Identify the different forms of the arts.	AERO 4.3.a. Begin to understand that art enriches their own lives.		
K	AERO 3.3.a. Evaluate works of art based on personal points of view.	AERO 4.1.a. Explore art concepts that cross disciplines (e.g., pattern, shape, scale, form, balance, repetition, rhythm)	AERO 4.2.a. Identify the different forms of the arts.	AERO 4.3.a. Describe how art enriches their own lives.		

1	AERO 3.3.a. Evaluate works of art based on personal points of view.	AERO 4.1.a. Identify art concepts that cross disciplines (e.g., pattern, shape, scale, form, balance, repetition, rhythm)	AERO 4.2.a. Identify the different forms of the arts.	AERO 4.3.a. Describe how art enriches people's lives.		
2	AERO 3.3.b. Use basic art concepts and vocabulary when evaluating works of art.		AERO 4.2.a. Identify the different forms of the arts. AERO 4.2.b. Understand what the arts have in common.		AERO 4.4.a. Identify products that artists design and make and the careers of those who make them.	
3	AERO 3.3.a. Evaluate works of art based on personal points of view. AERO 3.3.c. Use art concepts and vocabulary to reflect upon works of art.		AERO 4.2.a. Identify the different forms of the arts. AERO 4.2.b.. Understand what the arts have in common.			<u>IB PYP Phase (Phase 2)</u> -identify the stages of their own and others' creative processes <u>IB PYP Responding (Phase 3)</u> -reflect on their own and others' creative processes to inform their thinking

4	<p>AERO 3.3.c. Begin to document, organize, and reflect upon works of art for process journal.</p> <p>AERO 3.3.c Use art concepts and vocabulary to reflect upon works of art.</p>		<p>AERO 4.2.a. Identify the different forms of the arts.</p> <p>AERO 4.2.b.. Understand what the arts have in common.</p> <p>AERO 4.2.c.. Be aware that the arts can relate and combine for one purpose.</p>			<p>IB PYP Responding (Phase 3)</p> <p>-reflect on their own and others' creative processes to inform their thinking (IB PYP Phase 4)</p> <p>Reflect on factor that influence reactions to art.</p>
5	<p>AERO 3.3.a. Use external criteria to judge and evaluate works of art.</p> <p>AERO 3.3.c Use art concepts and vocabulary to reflect upon works of art.</p> <p>AERO 3.3.c. Begin to thoughtfully document, organize, and reflect upon works of art for process journal.</p>		<p>AERO 4.2.a. Describe the contributions of art forms and of artists in a multidisciplinary work of art.</p>	<p>AERO 4.3.a. Understand how art contributes to self-expression.</p>		<p>IB PYP Responding (Phase 4)</p> <p>-reflect on the factors that influence personal reactions to artwork</p> <p>- reflect throughout the creative process to challenge their thinking and enact new and unusual possibilities</p>

<p>6</p>	<p>AERO 3.3.a. Use external criteria to judge and evaluate works of art. AERO 3.3.b. Use art concepts and vocabulary to generate personal criteria for evaluating works of art. AERO 3.3.c. Thoughtfully document, organize, and reflect upon works of art for process journal.</p>		<p>AERO 4.2.a. Understand that multidisciplinary works of art (Music, Drama, and Visual Art) are more than the sum of their parts. AERO 4.2.b. Compare the media, materials, and processes (e.g., perceiving, responding, creating and communicating) used in visual art with those used in other arts disciplines.</p>	<p>AERO 4.3.a. Understand how art contributes to self-expression. AERO 4.3.b. Understand how and why knowledge of the arts is fundamental to our appreciation of our world and who we are. AERO 4.3.c. Understand how art is a universal language for expression and be globally-minded</p>	<p>AERO 4.4.b. Understand the contributions that artists make and the importance of these contributions to society.</p>	
-----------------	---	--	---	---	---	--

7	<p>AERO 3.3.a. Make insightful judgments about works of art, using an extensive range of art terms and concepts.</p> <p>AERO 3.3.b. Use art concepts and vocabulary to generate personal criteria for evaluating works of art.</p> <p>AERO 3.3.c. Thoughtfully document, organize, and reflect upon works of art for process journal.</p>		<p>AERO 4.2.a. Understand that multidisciplinary works of art (Music, Drama, and Visual Art) are more than the sum of their parts.</p> <p>AERO 4.2.b. Compare the media, materials, and processes (e.g., perceiving, responding, creating and communicating) used in visual art with those used in other arts disciplines.</p>	<p>AERO 4.3.a. Understand how art contributes to self-expression.</p> <p>AERO 4.3.b. Understand how and why knowledge of the arts is fundamental to our appreciation of our world and who we are.</p> <p>AERO 4.3.c. Understand how art is a universal language for expression and be globally-minded</p>	<p>AERO 4.4.b. Understand the contributions that artists make and the importance of these contributions to society.</p>	
---	---	--	--	---	---	--

<p>8</p>	<p>AERO 3.3.a. Make insightful judgments about works of art, using an extensive range of art terms and concepts. AERO 3.3.b. Generate and apply criteria to evaluate and critique the merit and significance of works of art. AERO 3.3.c. Thoughtfully document, organize, and reflect upon works of art for process journal.</p>	<p>AERO 4.1.a. Understand how the arts can increase understanding in other curricular areas and how other curricular areas can increase capacity in visual art.</p>		<p>AERO 4.3.a. Understand how art contributes to self-expression. AERO 4.3.b. Understand how and why knowledge of the arts is fundamental to our appreciation of our world and who we are. AERO 4.3.c. Understand how art is a universal language for expression and be globally-minded</p>	<p>AERO 4.4.b. Understand the contributions that artists make and the importance of these contributions to society.</p>	
-----------------	---	---	--	---	---	--

<p>9</p>	<p>AERO 3.3.a. Communicate complete critiques of the merit and significance of works of art, using social, cultural, historical and/or contextual relationships. AERO 3.3.b. Generate and apply criteria to select works for a portfolio that reflects artistic growth and achievement.</p>	<p>AERO 4.1.a. Synthesize knowledge of visual art and other curricular areas in order to enhance products and/or performance in each area.</p>	<p>AERO 4.2.a. Synthesize knowledge of visual art and other art forms in order to enhance products and/or performance in the arts.</p>	<p>AERO 4.3.a. Understand how art can encourage growth and continuous personal enrichment.</p>	<p>AERO 4.4.a. Learn how art can foster growth and continuous personal enrichment. AERO 4.4.b. Learn the experience, education, and training needed for various careers in art. AERO 4.4.c. Learn portfolio requirements for employment in various art professions (e.g., architect, photographer, graphic designer, and book illustrator).</p>	
-----------------	---	--	--	--	---	--

<p>10</p>	<p>AERO 3.3.a. Communicate detailed critiques of the merit and significance of works of art, using social, cultural, historical and/or contextual relationships. AERO 3.3.b. Generate and apply criteria to select works for a portfolio that reflects artistic growth and achievement.</p>	<p>AERO 4.1.a. Synthesize ability of visual art and other curricular areas in order to enhance products and/or performance in each area.</p>	<p>AERO 4.2.a. Synthesize ability of visual art and other art forms in order to enhance products and/or performance in the arts.</p>	<p>AERO 4.3.a. Understand how art can cultivate growth and continuous personal enrichment.</p>	<p>AERO 4.4.a. Know how art can foster growth and continuous personal enrichment. AERO 4.4.b. Know the experience, education, and training needed for various careers in art. AERO 4.4.c. Know portfolio requirements for employment in various art professions (e.g., architect, photographer, graphic designer, and book illustrator).</p>	
------------------	---	--	--	--	--	--

<p>11</p>	<p>AERO 3.3.a. Communicate thorough critiques of the merit and significance of works of art, using social, cultural, historical and/or contextual relationships. AERO 3.3.b. Generate and apply criteria to select works for a portfolio that reflects artistic growth and achievement.</p>	<p>AERO 4.1.a. Synthesize familiarity of visual art and other curricular areas in order to enhance products and/or performance in each area.</p>	<p>AERO 4.2.a. Synthesize familiarity of visual art and other art forms in order to enhance products and/or performance in the arts.</p>	<p>AERO 4.3.a. Understand how art can nurture growth and continuous personal enrichment.</p>	<p>AERO 4.4.a. Recognize how art can foster growth and continuous personal enrichment. AERO 4.4.b. Recognize the experience, education, and training needed for various careers in art. AERO 4.4.c. Recognize portfolio requirements for employment in various art professions (e.g., architect, photographer, graphic designer, and book illustrator).</p>	
------------------	---	--	--	--	---	--

<p>12</p>	<p>AERO 3.3.a. Communicate in-depth critiques of the merit and significance of works of art, using social, cultural, historical and/or contextual relationships.</p> <p>AERO 3.3.b. Generate and apply criteria to select works for a portfolio that reflects artistic growth and achievement.</p>	<p>AERO 4.1.a. Synthesize expertise of visual art and other curricular areas in order to enhance products and/or performance in each area.</p>	<p>AERO 4.2.a. Synthesize expertise of visual art and other art forms in order to enhance products and/or performance in the arts.</p>	<p>AERO 4.3.a. Understand how art can advance growth and continuous personal enrichment.</p>	<p>AERO 4.4.a. Master the habits of mind and the characteristics of the professional artist (e.g., taking risks, capacity to observe, self-discipline, organization).</p> <p>AERO 4.4.b. Master the experience, education, and training needed for various careers in art.</p> <p>AERO 4.4.c. Master portfolio requirements for employment in various art professions (e.g., architect, photographer, graphic designer, and book illustrator).</p>	
------------------	--	--	--	--	--	--

