

GRADE FIVE



English
Language Arts and Literature

Page 3



Social Studies
Pilot 2024

Page 19

Page 29



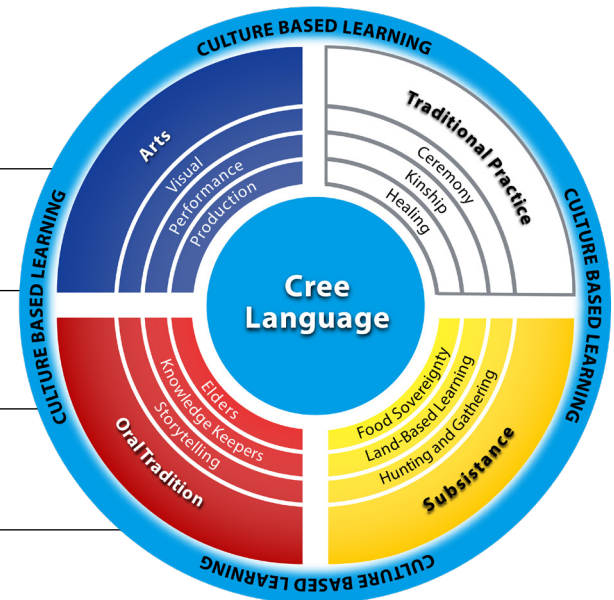
Mathematics

Page 43

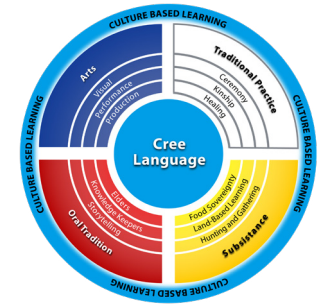





Science




Page 56












English Language Arts & Literature










Knowledge	Understanding	Skills & Procedures	ᑭᓴᑦᑭᓴᑦᑭᓴᑦ Nehiyaw Ways of Knowing	Other Suggestions
ORGANIZING IDEA				
Text Forms and Structures: Identifying and applying text forms and structures improves understanding of content, literary style, and our rich language traditions.				
GUIDING QUESTION				
How can text organization support expression and influence meaning?				
LEARNING OUTCOME				
Students examine how text genres, forms, and structures support and enhance communication.				
<p>Texts can be digital or non-digital.</p> <p>Texts can have more than one purpose, including to</p> <ul style="list-style-type: none"> • inform • entertain • persuade • inspire <p>Reading stamina can be developed through engaging with text forms, genres, or structures that are personally enjoyable.</p> <p>Literary text forms can be fiction or non-fiction and include</p> <ul style="list-style-type: none"> • photo essays • news articles • hybrids <p>[continued...]</p>	<p>Text Forms & Structures: 5T1.1 Text genres, forms, and structures can support the enjoyment and communication of ideas and information.</p>	<p>Examine the purpose of a variety of digital or non-digital texts.</p> <p>Engage with a variety of genres of literary texts.</p> <p>Determine the form and structure of a variety of literary texts.</p> <p>Develop reading stamina by engaging with text that is personally enjoyable.</p>	<p>  Creation Stories; Star Stories; Trickster Stories</p>	<p> Refer to Indigenous Book/ Story Lists in Resources on the Instructional Supports webpage.</p>


 Knowledge	Understanding	Skills & Procedures	ᑭᑭᑭᑭᑭᑭ Nehiyaw Ways of Knowing	Other Suggestions
<p>[continued...]</p> <p>Hybrid is a type of text that includes both fiction and non-fiction text forms.</p> <p>Narrative texts can be fiction or non-fiction and can be structured in a variety of ways, including</p> <ul style="list-style-type: none"> • beginning • problem • multiple events with many details • resolution of problem • ending 	<p>Text Forms & Structures:</p> <p>5T1.1 Text genres, forms, and structures can support the enjoyment and communication of ideas and information.</p>			
<p>Text features can be digital or non-digital and include sidebars and glossaries.</p>	<p>Text Forms & Structures:</p> <p>5T1.2 Text features can help organize content and identify information that is most important.</p>	<p>Examine a variety of text features that organize content and emphasize information that is most important.</p> <p>Include a variety of text features to organize content and to identify information that is most important.</p>		<p> “Speaking Our Truth: A Journey of Reconciliation” by Monique Gray Smith, 2017.</p>
<p>Fiction sub-genres include science fiction, tall tales, and traditional literature.</p> <p>A tall tale is an exaggerated folk tale that describes a central legendary character with extraordinary physical features or abilities.</p> <p>Science fiction is a modern fantasy text that describes technology, futuristic situations, and real or imagined scientific occurrences.</p> <p>Fictional texts can have a variety of structures, including flash-forward.</p> <p>A flash-forward interrupts the story plot to take an audience forward in time to events in the future.</p> <p>[continued...]</p>	<p>Text Forms & Structures:</p> <p>5T1.3 Engaging with fictional texts can help to analyze the world through the eyes of others.</p>	<p>Categorize texts according to a variety of fiction sub-genres.</p> <p>Examine a variety of fictional text structures, including flash-forward.</p> <p>[continued...]</p>		<p> David A. Robertson series beginning with “The Barren Grounds: The Misewa Saga, Book One,” 2020.</p>


 Knowledge	Understanding	Skills & Procedures	ᑭᑭᑭᑭ Nehiyaw Ways of Knowing	Other Suggestions
<p>[continued...]</p> <p>Elements of fiction include theme, the underlying message of a text.</p> <p>Third person point of view is where the author or text creator is narrating a story about the characters, referring to them by name or using pronouns.</p> <p>Types of characters include round and flat.</p> <p>A round character is interesting and layered and may change throughout a story.</p> <p>A flat character does not change throughout a story.</p> <p>Fictional texts can contain characters with multiple dimensions revealed by</p> <ul style="list-style-type: none"> • what they say, think, or do • what others say and think about them 	<p>Text Forms & Structures:</p> <p>5T1.3 Engaging with fictional texts can help to analyze the world through the eyes of others.</p>	<p>[continued...]</p> <p>Examine elements within a variety of fictional texts, including theme.</p> <p>Describe characters based on what they say, think, or do or what others say and think about them.</p>		<p> Graphic novel anthology - “This Place: 150 Years Retold” by Kateri Akiwenzie-Damm et al, 2019.</p>
<p>Non-fiction texts include persuasive texts, such as editorials and opinion pieces.</p> <p>Structures within non-fiction texts include</p> <ul style="list-style-type: none"> • larger topics and subtopics • cause and effect <p>Non-fiction texts can be examined to help the reader form opinions based on the structure, content, or source of information.</p>	<p>Text Forms & Structures:</p> <p>5T1.4 Engaging with non-fiction texts can help to analyze the world through the eyes of others.</p>	<p>Examine organizational structures of non-fiction texts.</p> <p>Discuss a variety of opinions regarding the structure, content, or source of information expressed in non-fiction texts.</p>		


 Knowledge	Understanding	Skills & Procedures	ᑭᑭᑭᑭ Nehiyaw Ways of Knowing	Other Suggestions
<p>Poetry can be experienced when it is read, listened to, or spoken.</p> <p>Poetic structures include lyric poetry and stanzas.</p> <p>Lyric poetry expresses personal emotions or feelings.</p> <p>A stanza is a series of lines grouped together in a poem that relate to a similar idea.</p>	<p>Text Forms & Structures:</p> <p>5T1.5 Poetry can be experienced for its beauty and emotion.</p>	<p>Listen to poems to identify beauty or emotion.</p> <p>Recite or sing a poem from memory.</p> <p>Examine figurative language that can be experienced for its beauty or emotion.</p> <p>Investigate poetic structures that contribute to creative expression of ideas, including stanzas.</p> <p>Experiment with creating lyric poetry.</p>		
<p>Dramatic works can activate the imagination and provide information about people in various times, places, and situations.</p> <p>In dramatic works, plot and characters are developed through dialogue and action.</p> <p>In dramatic works, ideas and information can be expressed through verbal, non-verbal, and paraverbal language.</p>	<p>Text Forms & Structures:</p> <p>5T1.6 Drama is a literary form that can artfully express stories and ideas.</p>	<p>Listen to, read, or view dramatic works to learn about artful expression of stories and ideas.</p> <p>Examine main characters and events in a variety of dramatic works.</p>		<p> “Four Faces of the Moon” by Amanda Strong, 2021. Graphic Novel.</p> <p> Empowering the Spirit: Sharing through Story</p> <p> Native American Legends Organized by Theme</p>
<p>Land can be understood through personal connections to its features, such as</p> <ul style="list-style-type: none"> • living things in the natural world • human-made structures • patterns and cycles • stories of place 	<p>Text Forms & Structures:</p> <p>5T1.7 Meaning is derived through personal experiences with various features of land.</p>	<p>Make connections between features of land and personal experiences.</p>	<p> Plants and Trees – Animate/ Inanimate</p>	<p>  The Gabriel Dumont Institute (GDI) Publishing Department has published or produced more than 80 Métis-specific books and educational resources since the early 1980s.</p>




Knowledge	Understanding	Skills & Procedures	ᑭᓴᓴᑦ Nehiyaw Ways of Knowing	Other Suggestions
ORGANIZING IDEA				
Oral Language: Listening and speaking form the foundation for literacy development and improve communication, collaboration, and respectful mutual understanding.				
GUIDING QUESTION				
How can the presentation of ideas and information be enhanced through oral communication?				
LEARNING OUTCOME				
Students investigate how oral language can be designed to communicate ideas and information.				
<p>Different time periods gave rise to different forms of oral communication, including</p> <ul style="list-style-type: none"> • storytelling • poetry • drama • choral speech • speeches or presentations <p>Oral traditions include the use of stories to connect prior knowledge to lived experiences.</p> <p>Oral traditions include diverse types of stories, including</p> <ul style="list-style-type: none"> • tales of everyday life • sacred stories • stories of extraordinary experiences • trickster stories or tales <p>Trickster stories or tales can</p> <ul style="list-style-type: none"> • have human, superhuman, and animal characters • teach lessons • reflect aspects of a culture <p>Oral traditions hold communities together based on some shared knowledge and values.</p>	<p>Oral Language: 5O1.1 The content and delivery of oral traditions are influenced by history, communities, or contexts.</p>	<p>Discuss cultural contexts of oral traditions.</p> <p>Discuss meanings of stories and lessons shared orally.</p>	<p>  Creation Stories; Star Stories; Trickster Stories</p>	<p> Empowering the Spirit: Sharing through Story</p>

 Knowledge	Understanding	Skills & Procedures	ᑭᑦᑲᑦᑲᑦ Nehiyaw Ways of Knowing	Other Suggestions
<p>Language that influences oral communication includes</p> <ul style="list-style-type: none"> • verbal • non-verbal • paraverbal <p>Verbal communication includes word choice and use.</p> <p>Choices can be intentional regarding how body movement can support communication.</p> <p>Paraverbal communication is the manner in which a message is delivered and involves</p> <ul style="list-style-type: none"> • stress or emphasis • articulation • pace • pitch or inflection • tone <p>Vocal sounds are affected by breath, body, and energy.</p> <p>Inflection is the process by which the voice slides up and down through a range of pitches.</p>	<p>Oral Language: 501.2 Oral communication can be enhanced through integration and adjustment of verbal, non-verbal, and paraverbal language.</p>	<p>Integrate verbal, non-verbal, and paraverbal language to enhance communication.</p> <p>Ensure messages are heard clearly by using breath, body, and energy to project voice.</p>	 Sharing and Talking Circles	 Talking Together: A Discussion Guide for Walking Together: Oral Tradition: Observing Practice Activity. Use the circle story technique to help Grade 3 students learn to read and write. (29:15 minutes)  Talking Together: A Discussion Guide for Walking Together: Oral Tradition: Beginning Together Activity. Discuss one of the Cree or French/Michif stories told in the resource and focus on how to engage students through storytelling.
<p>Content and delivery of oral communication can change based on purpose or audience.</p> <p>Language conventions or protocols can vary depending on the audience or purpose of oral communication.</p> <p>The size, shape, layout, and acoustics (echoing) of a space can influence oral communication.</p> <p>Oral communication can be enhanced through the selection of digital or non-digital tools or formats.</p>	<p>Oral Language: 501.3 Oral communication can be intentionally designed according to different situations to convey ideas and information.</p>	<p>Adjust the pitch or projection of the voice with respect to purpose, audience, context, and space.</p> <p>Adjust language conventions or protocols in oral communication.</p> <p>Select appropriate formats for oral communication based on audience and purpose.</p> <p>Present ideas and information in a logical manner to inform, persuade, or entertain.</p>		



 Knowledge	Understanding	Skills & Procedures	ᑭᑦᑲᑦᑲᑦᑲᑦ Ways of Knowing	Other Suggestions
<p>Collaborative processes include building trust by listening to, acknowledging, and accepting the contributions of others.</p> <p>Collaborative and effective dialogue includes consideration of the perspectives of others and use of respectful language.</p> <p>Demonstrating respect for how other people wish to be addressed maintains relationships.</p> <p>Adaptability and compromise can lead to consensus in collaborative activities.</p> <p>Non-verbal and paraverbal language can enhance collaborative dialogue.</p>	<p>Oral Language: 5O1.4 Collaboration is an active process supported by effective dialogue.</p>	<p>Engage in collaborative dialogue when sharing ideas, solving problems, or making decisions.</p> <p>Contribute to discussions or dialogues by agreeing, disagreeing, and adding to or explaining ideas.</p> <p>Use respectful language when collaborating with others.</p> <p>Demonstrate adaptability to build consensus when perspectives or opinions within groups differ.</p>		
ORGANIZING IDEA Vocabulary: Communication and comprehension are improved by understanding word meaning and structures.				
GUIDING QUESTION How does vocabulary support communication?				
LEARNING OUTCOME Students analyze how knowledge of vocabulary supports meaning and use of language.				
<p>Words in the English language come from a variety of origins.</p> <p>Vocabulary changes over time and reflects how words are used at a given time in society.</p> <p>Affixes change the meaning of a word when applied to a base and include <ous>, <ious>, <al>, <ial>, <ian>, <ic>, <ical>, <ment>, <ity>, <ant>, <ent>, <ance>, <ence>, <circu>, <per>, <trans>, <ad>, <sub>, <ob>, <com>, and <ex>.</p>	<p>Vocabulary: 5V1.1 Word origins and morphemes influence the meaning and use of vocabulary in the English language.</p>	<p>Examine words to determine their origins.</p> <p>Examine words with meanings that have changed over time.</p> <p>Examine words that are new to the English language.</p> <p>Investigate the meaning of bases and affixes in words.</p>		<p>Identify place names, features, items and animals in Cree and other Indigenous languages. For example, Muskoseepi, Nisku, Ponoka, Saskatchewan, moswa - moose; pimikan - pemmican, etc.</p>


 Knowledge	Understanding	Skills & Procedures	ᑎᑦᐱᑦᑎᑦᑎᑦ Nehiyaw Ways of Knowing	Other Suggestions
<p>Increased knowledge of vocabulary supports comprehension of text.</p> <p>Tools for vocabulary development include thesauruses and dictionaries.</p> <p>Strategies for vocabulary development include extensive reading and listening to and noting how others use words.</p>	<p>Vocabulary: 5V1.2 Vocabulary learning involves the use of strategies and tools.</p>	<p>Discuss multiple ways to learn and remember vocabulary.</p> <p>Record words of personal interest.</p> <p>Use a variety of tools to build vocabulary knowledge.</p> <p>Engage with a wide variety of texts to expand vocabulary.</p>		
<p>Figurative language is language that has non-literal or figurative meanings and includes metaphors.</p> <p>A metaphor compares two things that are not alike but have something in common, without using comparison words such as like or as.</p>	<p>Vocabulary: 5V1.3 Knowledge of an extended vocabulary is a lifelong pursuit that enhances the ability to communicate.</p>	<p>Apply a wide variety of words to communicate in new ways.</p> <p>Apply tier 2 words to enhance meaning within subject content.</p> <p>Apply tier 3 words within subject content.</p> <p>Discuss how context can influence the meaning of words and phrases.</p> <p>Examine word meanings in similes, metaphors, and analogies.</p> <p>Analyze the meanings of words or phrases expressed figuratively.</p> <p>Integrate figurative language into personal writing and oral communications.</p>		<p>Onomatopoeia - identify animals that sound like their name in Cree such as “oho” for owl.</p>


 Knowledge	Understanding	Skills & Procedures	ᑭᐱᐱᑦ Nehiyaw Ways of Knowing	Other Suggestions
<p>[continued...]</p> <p>Comprehension is enhanced when the purpose for reading is clear.</p> <p>Managing information involves researching, organizing, and using information for specific purposes.</p>	<p>Comprehension: 5CP1.1 Comprehension is enhanced through application of critical thinking strategies and skills that support interpretations of texts and management of information.</p>			
<p>Connections with texts that can provide evidence include</p> <ul style="list-style-type: none"> • text to self • text to text • text to world <p>Summarizing includes identifying main ideas and using supporting evidence.</p>	<p>Comprehension: 5CP1.2 Comprehension can be enhanced when connections with texts are supported by summarized evidence.</p>	<p>Respond to texts by summarizing main ideas and providing supporting evidence from self, other texts, or the world.</p>		
<p>Ideas and information in texts can be explicit or implicit.</p> <p>Inferences and predictions can be made about plot, characters, setting, and main ideas of texts.</p>	<p>Comprehension: 5CP1.3 Comprehension and interpretation of texts requires attention to ideas or information that may be explicit or implicit.</p>	<p>Examine ideas and information within texts that are explicit and implicit.</p> <p>Make inferences based on content that is implicit in texts.</p> <p>Revise or confirm predictions based on new or additional information from texts or additional sources.</p> <p>Analyze ideas and information in texts to interpret and respond.</p> <p>Use evidence from texts or additional sources to support responses and interpretations.</p>		



 Knowledge	Understanding	Skills & Procedures	ᑭᑭᑭᑭᑭ Nehiyaw Ways of Knowing	Other Suggestions
<p>Perspectives include attitudes, beliefs, or ways of thinking about events or information.</p> <p>Perspectives are influenced by cultures, experiences, and interests.</p> <p>Characters in texts present various perspectives.</p>	<p>Comprehension: 5CP1.4</p> <p>Perspectives revealed in texts enhance comprehension and enrich understandings of the world.</p>	<p>Explore how varied perspectives presented in texts can influence personal perspectives.</p> <p>Examine how the interests, experiences, or perspectives of a character might influence how that character thinks, feels, or acts.</p> <p>Compare and contrast the varied perspectives of main and supporting characters.</p> <p>Identify various perspectives in texts and propose alternative perspectives.</p>		<p>Explore two-eyed seeing (learning to see from one eye with Indigenous knowledge and ways of knowing, and from the other eye with Western knowledge and ways of knowing.)</p> <p> Compare “The Giving Tree” by Leah Dorian and Shel Silverstein.</p>
<p>Context refers to the circumstances that form the background of a person, an event, an idea, or a text.</p> <p>Personal contexts can contribute to how a text is created or interpreted.</p> <p>The author’s or text creator’s context can contribute to how a text is created or interpreted.</p> <p>Context can impact what characters think and do.</p>	<p>Comprehension: 5CP1.5</p> <p>An awareness of context strengthens comprehension of texts.</p>	<p>Examine information from texts that describes context around people, ideas, or events.</p> <p>Analyze the actions or feelings of characters in stories, considering the context.</p> <p>Consider how personal interests, experiences, or perspectives might influence how texts are understood or created.</p> <p>Investigate background information about the author or text creator to provide context for informational texts.</p> <p>Examine contextual information about characters or events in fictional texts.</p>		<p> Indigenous literature as mentor texts such as “Stolen Words” by Melanie Florency, 2017 and “A Big Mistake” by Richelle Lovegrove, 2015.</p>




Knowledge	Understanding	Skills & Procedures	ᑭᑦᑎᑦᑎᑦᑎᑦ Nehiyaw Ways of Knowing	Other Suggestions
ORGANIZING IDEA Writing: Ideas and information can be articulated accurately and imaginatively through the use of writing processes and an understanding of the author's craft.				
GUIDING QUESTION How does proficient writing enhance communication skills?				
LEARNING OUTCOME Students enhance the accuracy and artistry of expression through creative and critical thinking processes.				
<p>Writing processes can be used to break writing into manageable chunks so that text creators can focus on impact or artistry.</p> <p>Writing processes include</p> <ul style="list-style-type: none"> • planning • drafting • revising • editing • publishing <p>Planning includes</p> <ul style="list-style-type: none"> • consideration of audience, purpose, and form • idea generation • narrowing a topic <p>Written expressions of ideas or information can follow organizational structures, such as</p> <ul style="list-style-type: none"> • introduction, opening, or lead • details in order of sequence or importance • transitions • conclusions <p>Topic and concluding sentences provide structure and link ideas and information within paragraphs.</p> <p>Interest can be created by varying sentence structure and length.</p> <p>[continued...]</p>	<p>Writing: 5W1.1 Writing skills can be developed to understand self and influence others.</p>	<p>Create written texts for a variety of audiences and purposes.</p> <p>Create written texts in a variety of forms and structures.</p> <p>Develop creative expression through the use of organizational processes, methods, and tools.</p> <p>Express ideas through multiple-paragraph works that include topic introductions, supporting evidence, and conclusions.</p> <p>Arrange and express ideas logically, using interesting details and transitions between sentences or paragraphs.</p> <p>Communicate a clear position supported by relevant evidence.</p> <p>Revise drafts to improve the fluency, coherence, sequence, and logical support of ideas.</p> <p>Edit writing for spelling, punctuation, and grammar.</p> <p>Publish selected pieces, incorporating graphics, captions, charts, or other text features to support a purpose or connect with an audience.</p>	<p> Pow Wow Dance Series (11 videos)</p>	<p>For written work, consider selecting topics that are land-based, related to the environment, Indigenous current topics such as Orange Shirt Day and Truth and Reconciliation, treaties, etc.</p> <p> Project of Heart is an inquiry based, hands-on, collaborative, inter-generational, artistic journey of seeking truth about the history of Aboriginal people in Canada. Can also be linked to Orange Shirt Day.</p> <p>[continued...]</p>

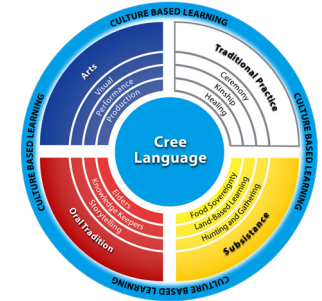
 Knowledge	Understanding	Skills & Procedures	ᑭᑦᑲᑦᑲᑦ Nehiyaw Ways of Knowing	Other Suggestions
<p>[continued...]</p> <p>Writing fluency is the rhythm and flow of language in written text.</p> <p>Revision includes adding or removing words, phrases, or sentences to ensure writing is clear and focused from beginning to end.</p>	<p>Writing:</p> <p>5W1.1 Writing skills can be developed to understand self and influence others.</p>			<p>[continued...]</p> <p>After hearing many of the recommended traditional legends, have students create their own legend with connections to land and/or animals.</p>
<p>Creative thinking processes involve</p> <ul style="list-style-type: none"> • elaborating on a product to ensure alignment with intended audience, purpose, or context • considering the processes of other creators • constructing drafts or models • applying feedback to improve the creative product • a willingness to confront challenges <p>Words selected to include in texts may change depending on the audience, purpose, or context.</p> <p>Word choice can reflect the author's voice or artistry through</p> <ul style="list-style-type: none"> • detail • clarity • variety • humour • dialogue <p>Words selected to enhance written texts include</p> <ul style="list-style-type: none"> • sensory language • synonyms • antonyms • specific words or phrases • figurative language <p>A mentor text serves as an example of effective communication for students.</p> <p>Mood is the atmosphere created by setting, attitude of the narrator, and descriptions.</p>	<p>Writing:</p> <p>5W1.2 Creative thinking can enhance personal expression and artistry.</p>	<p>Apply creative thinking processes to enhance personal expression and artistry.</p> <p>Analyze mentor texts to determine how word choice can influence the purpose or audience of a text.</p> <p>Create text that uses plot, characterization, dialogue, and figurative language to entertain an audience.</p> <p>Create expressive descriptions by selecting vocabulary to convey mood or sensory images.</p> <p>Establish a plot, point of view, setting, and problem through creative writing.</p> <p>Create texts that show, rather than tell, story events.</p> <p>Evaluate how language and dialogue are used to express voice, point of view, and ideas.</p> <p>Determine alternative words and meanings using a variety of digital or non-digital tools.</p>		<p>Create texts that show, rather than tell, story and events. Pow wow dancing is a good example. (There is a collection of Youtube videos entitled Pow Wow Sweat.)</p>





 Knowledge	Understanding	Skills & Procedures	ᑭᑦᑲᑦᑲᑦᑲᑦᑲᑦᑲᑦ Ways of Knowing	Other Suggestions
<p>Research processes involve management of information, including</p> <ul style="list-style-type: none"> • questioning • gathering • organizing • recording <p>Topics that are broad may need to be narrowed to a manageable size for focused writing.</p> <p>Sources of information can be digital or non-digital and include people such as Knowledge Keepers, Elders, and spiritual leaders.</p> <p>A Knowledge Keeper is a respected community member who is recognized as having expertise in specific issues or skills.</p> <p>Elders are individuals recognized by their communities as having historical, cultural, and spiritual knowledge and wisdom.</p> <p>Protocols for accessing information may vary by source, context, community, or culture.</p> <p>Protocols can exist for sharing stories and histories.</p> <p>Methods and tools can be used to gather and organize information, including note taking.</p> <p>Research findings can be shared in a variety of digital or non-digital forms, including visual images.</p> <p>Ethical use of information includes</p> <ul style="list-style-type: none"> • asking permission to use, share, or store information that is about, was created by, or belongs to someone else • citing basic information used to inform writing • fair and accurate representation of individuals or information 	<p>Writing:</p> <p>5W1.3 Research processes can involve examining materials or information and reaching new conclusions.</p>	<p>Write to inform, explain, describe, or report for a variety of purposes and audiences.</p> <p>Narrow research questions to determine a clear, well-defined topic.</p> <p>Develop a main idea or topic supported by facts, details, examples, and explanations.</p> <p>Evaluate the validity and reliability of information and sources.</p> <p>Select a variety of relevant sources to inform writing.</p> <p>Summarize and organize ideas gained from multiple sources using a variety of methods or tools.</p> <p>Access and use information ethically.</p>		




 Knowledge	Understanding	Skills & Procedures	ᑭᑭᑭᑭᑭ Nehiyaw Ways of Knowing	Other Suggestions
<p>Written communication can be created by selecting a variety of digital or non-digital methods or tools, such as</p> <ul style="list-style-type: none"> • printing • keyboarding • cursive handwriting <p>The selection of digital or non-digital tools for written works can support clarity and voice.</p>	<p>Writing: 5W1.4 The method or tool used to present written works can influence how content is perceived.</p>	<p>Evaluate how an author’s selection of a method or tool can impact the audience’s understanding or response to a text.</p> <p>Experiment with methods or tools to enhance communication or create effects.</p> <p>Demonstrate legibility and writing fluency through the use of printing, cursive handwriting, or keyboarding.</p>		
ORGANIZING IDEA Conventions: Understanding grammar, spelling, and punctuation makes it easier to communicate clearly, to organize thinking, and to use language for desired effects.				
GUIDING QUESTION How might an informed use of conventions support effective communication?				
LEARNING OUTCOME Students apply and experiment with conventions to enhance precision and artistry of communication.				
<p>Capitalization is used to indicate the importance of certain words in texts.</p> <p>Abbreviations can make communications easier and faster.</p> <p>Punctuation includes parentheses, which indicate additional, separate, or less important words or numbers.</p>	<p>Conventions: 5CV1.1 Capitalization and punctuation can support effective written communication.</p>	<p>Apply capitalization to support effective written communication.</p> <p>Apply punctuation to support effective written communication.</p> <p>Experiment with capitalization and punctuation to achieve a desired effect.</p>		<p> “Elements of Indigenous Style: A Guide for Writing by and About Indigenous Peoples” by Gregory Younging, 2018.</p>
<p>Tense should be maintained throughout written or oral expression and includes</p> <ul style="list-style-type: none"> • present tense • past tense • future tense <p>[continued...]</p>	<p>Conventions: 5CV1.2 Communication can be supported by conventions of grammar.</p>	<p>Apply appropriate tense throughout communications.</p> <p>Identify subject-verb agreement in communications.</p> <p>[continued...]</p>		






 Knowledge	Understanding	Skills & Procedures	ᑭᐱᑦᑭᐱᑦ Nehiyaw Ways of Knowing	Other Suggestions
<p>[continued...]</p> <p>An adverb</p> <ul style="list-style-type: none"> describes a verb often ends in <ly> is sometimes placed in front of the verb and is sometimes placed after <p>Conjunctions are used to join ideas together in sentences and are also called connecting words.</p> <p>A pronoun used in place of a noun must agree in number—singular or plural—and includes</p> <ul style="list-style-type: none"> possessive pronouns subject pronouns object pronouns <p>Object pronouns replace the noun to receive the action in a sentence (e.g., me, you, him, her, us, them, whom).</p>	<p>Conventions: 5CV1.2</p> <p>Communication can be supported by conventions of grammar.</p>	<p>[continued...]</p> <p>Determine nouns or pronouns that are the subject in a variety of sentences.</p> <p>Determine nouns or pronouns that are the object in a variety of sentences.</p> <p>Use noun-pronoun agreement in communications.</p> <p>Vary the position of adverbs in sentences.</p> <p>Integrate conjunctions to connect phrases in sentences.</p> <p>Distinguish between different types of pronouns used in a sentence.</p>		
<p>Rapid and accurate application of spelling patterns fosters writing fluency.</p> <p>Knowledge of morphemes can be applied to spell words correctly.</p>	<p>Conventions: 5CV1.3</p> <p>Spelling accuracy can be supported by recognizing relationships between word patterns and structures.</p>	<p>Investigate spelling patterns within and across words.</p> <p>Apply knowledge of spelling patterns to spell unfamiliar words.</p> <p>Apply knowledge of prefixes and suffixes to spell words.</p>		



Social Studies







 Big Idea, Major Concepts, GLOs	Specific Learning Outcomes	ᑭᓴᓴᑦ Nehiyaw Ways of Knowing	Other Suggestions
5.1 Physical Geography of Canada			
GENERAL OUTCOME: Students will demonstrate an understanding and appreciation of how the physical geography and natural resources of Canada affect the quality of life of all Canadians			
VALUES AND ATTITUDES			
5.1.1 Value Canada’s physical geography and natural environment:	<ul style="list-style-type: none"> • appreciate the variety and abundance of natural resources in Canada (ER, LPP) • appreciate the diversity of geographic phenomena in Canada (LPP) • appreciate the environmental significance of national parks and protected areas in Canada (ER, LPP) • appreciate how the land sustains communities and the diverse ways that people have of living with the land (GC, LPP) • appreciate the influence of the natural environment on the growth and development of Canada (LPP) • demonstrate care and concern for the environment through their choices and actions (GC, LPP) • appreciate the geographic vastness of Canada (LPP) 	<p> Moose, Elk, and Deer Calling Series: Hunting Protocols and Stewardship</p> <p>  How Medicines Came to Man</p>	


 Big Idea, Major Concepts, GLOs	Specific Learning Outcomes	ᑭᐱᑦᑎᑦ Nehiyaw Ways of Knowing	Other Suggestions
KNOWLEDGE AND UNDERSTANDING			
5.1.2 Examine, critically, the physical geography of Canada by exploring and reflecting upon the following questions and issues:	<ul style="list-style-type: none"> • What are the major geographical regions, landforms and bodies of water in Canada? (LPP) • How do landforms, bodies of water and natural resources affect the quality of life in Canada? (LPP) • How have natural disasters and severe weather been part of Canada's physical geography? (LPP, TCC) • What are the differences and similarities among the geographical regions of Canada? (LPP) • How is the geographical region they live in different from other regions of Canada? (LPP) • What are the factors that determine climate in the diverse geographical regions of Canada (e.g., latitude, water, mountains)? (LPP) • How are Canada's national parks and protected areas important to the sustainability of Canada's natural environment? (ER, LPP) 	 The Rolling Head  Legend of Raven and Water	
5.1.3 Analyze how people in Canada interact with the environment by exploring and reflecting upon the following questions and issues:	<ul style="list-style-type: none"> • In what ways do natural resources and the physical geography of a region determine the establishment of communities? (ER, LPP) • How are natural resources used, exchanged and conserved in Canada? (ER, LPP) • Whose responsibility should it be to ensure the preservation of Canada's national parks and protected areas? (C, ER, LPP) 		



 Big Idea, Major Concepts, GLOs	Specific Learning Outcomes	ᑭᑭᑭᑭ Nehiyaw Ways of Knowing	Other Suggestions
5.2 Histories and Stories of Ways of Life in Canada			
GENERAL OUTCOME: Students will demonstrate an understanding of the people and the stories of Canada and their ways of life over time, and appreciate the diversity of Canada's heritage.			
VALUES AND ATTITUDES			
5.2.1 Appreciate the complexity of identity in the Canadian context:	<ul style="list-style-type: none"> • recognize how an understanding of Canadian history and the stories of its peoples contributes to their sense of identity (I, TCC) • acknowledge oral traditions, narratives and stories as valid sources of knowledge about the land and diverse Aboriginal cultures and history (CC, I, TCC) • acknowledge the roots of Francophone identity and presence in Canada (CC, I, TCC) • acknowledge British influence and presence in Canada (CC, I, TCC) • acknowledge the contributions made by diverse cultural groups to the evolution of Canada (CC, I, TCC) • recognize how changes in society can affect identity (CC, I) 	 Plants and Trees – Animate/Inanimate  Legend of Rat Root	
KNOWLEDGE AND UNDERSTANDING			
5.2.2 Examine, critically, the ways of life of Aboriginal peoples in Canada by exploring and reflecting upon the following questions and issues:	<ul style="list-style-type: none"> • What do the stories of First Nations, Métis and Inuit peoples tell us about their beliefs regarding the relationship between people and the land? (I, CC, TCC, LPP) • How are the Aboriginal cultures and ways of life unique in each of the western, northern, central and eastern regions of Canada? (I, CC, TCC) • How were the natural environment and geography of each region of Canada determining factors of the diversity among Aboriginal groups (e.g., languages, symbolism)? (LPP, TCC) • What was the significance of the potlatch to the identity of the Aboriginal peoples of the Northwest Coast? (I, CC, LPP) • In what ways do anthropology and archaeology contribute to our understanding of First Nations, Métis and Inuit peoples? (CC, LPP, TCC) 	 Stewardship and Community – Sharing  The Rolling Head	


 Big Idea, Major Concepts, GLOs	Specific Learning Outcomes	ᑕᐱᑦᑎᑦᑎᑦ Nehiyaw Ways of Knowing	Other Suggestions
5.2.3 Examine, critically, ways of life in New France by exploring and reflecting upon the following questions and issues:	<ul style="list-style-type: none"> How do stories and legends of the coureurs des bois and voyageurs inform us about Francophone history, culture and presence throughout Canada? (I, CC, TCC) What do stories about the habitants tell us about Francophone history, culture and presence in Canada? (I, CC, TCC) 		
5.2.4 Examine, critically, ways of life of the fur traders by exploring and reflecting upon the following questions and issues:	<ul style="list-style-type: none"> How are the stories of the Métis people, their culture and heritage rooted in the fur trade? (CC, I, TCC) How do stories about ways of life in fur trade forts reflect the British influence in Canada? (CC, TCC, PADM) What were the main languages spoken by fur traders and their families in the fur trade forts? (I, CC, TCC, ER) 	 Introduction to Traps and Snares Series (14 videos)	
5.2.5 Examine, critically, ways of life of the United Empire Loyalists by exploring and reflecting upon the following questions and issues:	<ul style="list-style-type: none"> What do stories of the United Empire Loyalists tell us about British culture and presence in Canada? (CC, I, TCC) How did the diversity of United Empire Loyalists contribute to Canadian diversity? (I, CC, TCC, LPP) 		
5.2.6 Examine, critically, the ways of life of immigrants from the British Isles during the Great Migration by exploring and reflecting upon the following questions and issues:	<ul style="list-style-type: none"> What do stories of Irish and Scottish immigrants tell us about their heritage and presence in Canada? (CC, I, TCC) What do stories of British peoples tell us about the British history, culture and presence in Canada? (CC, I, TCC) 		
5.2.7 Examine, critically, how the North West Mounted Police shaped ways of life in Canada by exploring and reflecting upon the following questions and issues:	<ul style="list-style-type: none"> What do stories of the North West Mounted Police tell us about the settlement and development of western and northern Canada? (LPP, PADM) How have stories of the North West Mounted Police shaped identity in western and northern Canada? (I, TCC, PADM) 		


 Big Idea, Major Concepts, GLOs	Specific Learning Outcomes	ᑭᓐᓂᓐ Nehiyaw Ways of Knowing	Other Suggestions
5.2.8 Examine, critically, ways of life of non-European immigrants by exploring and reflecting upon the following questions and issues:	<ul style="list-style-type: none"> How do stories of Chinese immigrants (i.e., railway workers) contribute to an understanding of the development of Canada? (CC, I, TCC) What do stories of the Underground Railroad tell us about the history and presence of Black communities in Canada? (CC, I, TCC, LPP) How do stories of immigrants from India contribute to an understanding of diversity in Canada? (CC, I) 		
5.2.9 Examine, critically, how European immigrants shaped ways of life in western Canada by exploring and reflecting upon the following questions and issues:	<ul style="list-style-type: none"> What do stories of immigrants from Ukraine, Poland, Russia and Germany tell us about their history and presence in western Canada? (CC, I, GC, LPP, TCC) How were European immigrants affected by pressures to conform in western Canada? (C, CC, I, GC, LPP, TCC) 		
5.3 Canada: Shaping an Identity			
GENERAL OUTCOME: Students will demonstrate an understanding of the events and factors that have changed the ways of life in Canada over time and appreciate the impact of these changes on citizenship and identity.			
VALUES AND ATTITUDES			
5.3.1 Appreciate how changes impact citizenship and identity:	<ul style="list-style-type: none"> recognize how economic and political changes impact ways of life of citizens (C, ER, I, PADM) recognize the effects of Confederation on citizenship and identity from multiple perspectives (C, I, PADM, TCC) recognize the historical significance of French and English as Canada's official languages (C, I, PADM) 		 UNDRIP (United Nations Declaration on the Rights of Indigenous Peoples)
KNOWLEDGE AND UNDERSTANDING			
5.3.2 Assess, critically, the changes that occurred in Canada immediately following Confederation by exploring and reflecting upon the following questions and issues:	<ul style="list-style-type: none"> How did John A. Macdonald and George-Étienne Cartier contribute as partners of Confederation? (TCC, PADM) How did the circumstances surrounding Confederation eventually lead to French and English becoming Canada's two official languages? (I, C, PADM) 		

 Big Idea, Major Concepts, GLOs	Specific Learning Outcomes	ᑭᓴᓴᑦ Nehiyaw Ways of Knowing	Other Suggestions
5.3.2 Assess, critically, the changes that occurred in Canada immediately following Confederation by exploring and reflecting upon the following questions and issues:	<ul style="list-style-type: none"> • How did the building of Canada’s national railway affect the development of Canada? (CC, ER, PADM) 		
	<ul style="list-style-type: none"> • Why were Aboriginal peoples excluded from the negotiations surrounding Confederation? (TCC, PADM) 		
5.3.3 Assess, critically, how the Famous Five brought about change in Canada by exploring and reflecting upon the following questions and issues:	<ul style="list-style-type: none"> • Who were the Famous Five? (LPP, TCC) 		
	<ul style="list-style-type: none"> • How did they identify the need for change in Canadian laws? (C, I, PADM) 		
	<ul style="list-style-type: none"> • How did the changes brought on by their actions affect individual rights in Canada? (C, I, PADM) 		
5.3.4 Assess, critically, how economic booms and crashes affected ways of life in Canada by exploring and reflecting upon the following questions and issues:	<ul style="list-style-type: none"> • How did the First World War contribute to the industrialization and urbanization of Canada? (ER, LPP) 	 Legend of Wolverine	
	<ul style="list-style-type: none"> • In what ways did the Great Depression of the 1930s affect ways of life in urban and rural communities? (ER, LPP, TCC) 		
	<ul style="list-style-type: none"> • How did the economic boom immediately following the Second World War affect ways of life in Canada? (CC, ER, TCC) 		
5.3.5 Assess, critically, how historical events shaped collective identity in the Canadian context by exploring and reflecting upon the following questions and issues:	<ul style="list-style-type: none"> • How was the Statute of Westminster a recognition of Canada as a country? (C, I, TCC) 		
	<ul style="list-style-type: none"> • How did Lester B. Pearson’s initiative within the United Nations contribute to Canada’s identity as a peacekeeping country? (GC, I, PADM) 		
	<ul style="list-style-type: none"> • How did the adoption of the Canadian flag affect collective identity within Canada? (I, LPP) 		
	<ul style="list-style-type: none"> • How was the patriation of the Constitution in 1982 a step toward nationhood? (GC, I, PADM) 		
	<ul style="list-style-type: none"> • How is the Canadian Charter of Rights and Freedoms a symbol of Canada’s emerging identity? (I, PADM) 		
	<ul style="list-style-type: none"> • What factors led to the creation of Nunavut? (I, CC, LPP, PADM) 		

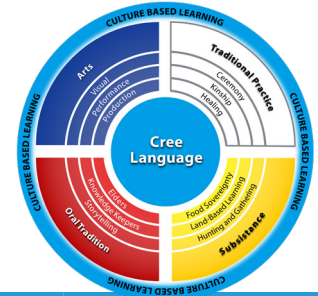
 Big Idea, Major Concepts, GLOs	Specific Learning Outcomes	ᑭᐱᐱᑦ Nehiyaw Ways of Knowing	Other Suggestions
SKILLS AND PROCESSES FOR SOCIAL STUDIES			
Dimensions of Thinking			
5.S.1 Develop skills of critical thinking and creative thinking:	<ul style="list-style-type: none"> • analyze significant local and current affairs from a variety of sources, distinguishing between fact and opinion • evaluate ideas, information and positions from multiple perspectives • re-evaluate personal opinions to broaden understanding of a topic or an issue • generate original ideas and strategies in situations of individual and group activities • seek responses to inquiries from various authorities through electronic media • recognize that information serves different purposes and that data from electronic sources may need to be verified to determine accuracy or relevance for the purpose used 		
5.S.2 Develop skills of historical thinking:	<ul style="list-style-type: none"> • use photographs and interviews to make meaning of historical information • use historical and community resources to understand and organize the sequence of national historical events • explain the historical context of key events of a given time period • organize information, using such tools as a database, spreadsheet or electronic webbing 		
5.S.3 Develop skills of geographic thinking:	<ul style="list-style-type: none"> • use latitude and longitude to determine the absolute location of places in Canada on maps and globes • construct maps, diagrams and charts to display geographic information • use historical maps to make meaning of historical events and issues • use cardinal and intermediate directions and simple grids to locate places on maps and globes • use the scale on maps and globes to determine the distance between places 		




 Big Idea, Major Concepts, GLOs	Specific Learning Outcomes	ᑭᐱᑦᑎᑦᑎᑦᑎᑦ Nehiyaw Ways of Knowing	Other Suggestions
5.S.3 Develop skills of geographic thinking:	<ul style="list-style-type: none"> • list, map and discuss major waterways that have been significant in the establishment of communities in Canada (e.g., St. Lawrence River, Great Lakes, St. Lawrence Seaway, Red River) 		
5.S.4 Demonstrate skills of decision making and problem solving:	<ul style="list-style-type: none"> • determine when a decision needs to be made in dealing with problems and issues • collaborate with others to apply strategies for decision making and problem solving • select and use technology to assist in problem solving • use data gathered from a variety of electronic sources to address identified problems • solve problems requiring the sorting, organizing, classifying and extending of data, using such tools as calculators, spreadsheets, databases or hypertext technology • use graphic organizers, such as mind mapping/webbing, flow charting and outlining, to present connections between ideas and information in a problem-solving environment • generate alternative solutions to problems by using technology to facilitate the process 		
Social Participation as a Democratic Practice			
5.S.5 Demonstrate skills of cooperation, conflict resolution and consensus building:	<ul style="list-style-type: none"> • consider multiple points of view while attempting to reach group consensus • demonstrate the ability to deal constructively with diversity and disagreement • work collaboratively with others to achieve a common goal • record group brainstorming, planning and sharing of ideas by using technology • retrieve data from available storage devices, such as a shared folder, to which a group has contributed 	 Sharing and Talking Circles	
5.S.6 Develop age-appropriate behaviour for social involvement as responsible citizens contributing to their community:	<ul style="list-style-type: none"> • demonstrate commitment to the well-being of the school or community by volunteering to help where needed 		


 Big Idea, Major Concepts, GLOs	Specific Learning Outcomes	ᑭᑦᑲᑦᑲᑦ Nehiyaw Ways of Knowing	Other Suggestions
Research for Deliberative Inquiry			
5.S.7 Apply the research process:	<ul style="list-style-type: none"> • determine themes, patterns and trends from information gathered • use graphs, tables, charts and Venn diagrams to interpret information • draw and support conclusions, based on information gathered, to answer a research question • cite references as part of research • design and follow a plan, including a schedule, to be used during an inquiry process, and make revisions to the plan, as necessary • access and retrieve appropriate information from the Internet by using a specific search path or from given uniform resource locators (URLs) • navigate within a document, compact disc or other software program that contains links • organize information gathered from the Internet, or an electronic source, by selecting and recording the data in logical files or categories • organize information, using such tools as a database, spreadsheet or electronic webbing • use a variety of technologies to organize and synthesize researched information • reflect on and describe the processes involved in completing a project 		
Communication			
5.S.8 Demonstrate skills of oral, written and visual literacy:	<ul style="list-style-type: none"> • select appropriate forms of delivery for written and oral information, taking particular audiences and purposes into consideration • respond appropriately to comments and questions, using language respectful of human diversity • listen to others to understand their perspectives • create visual images for particular audiences and purposes • identify and distinguish points of view expressed in electronic sources on a particular topic 		







 Big Idea, Major Concepts, GLOs	Specific Learning Outcomes	ᑎᐱᐃᑦᑦ Nehiyaw Ways of Knowing	Other Suggestions
5.S.8 Demonstrate skills of oral, written and visual literacy:	<ul style="list-style-type: none"> • extend the scope of a project beyond classroom collaboration by using communication technologies, such as the telephone and e-mail • communicate effectively through appropriate forms, such as speeches, reports and multimedia presentations, applying information technologies that serve particular audiences and purposes 		
5.S.9 Develop skills of media literacy:	<ul style="list-style-type: none"> • examine how various people might interpret a media message differently • examine diverse perspectives regarding an issue presented in the media 		






Social Studies Pilot 2024





 Knowledge	Understanding	Skills & Procedures	ᑭᐱᐱᐱ Nehiyaw Ways of Knowing	Other Suggestions
<p>PREAMBLE: Teachers can increase their own understandings of Indigenous ways of knowing and being and history in relation to social studies curricular outcomes through the following recommended courses:</p> <ul style="list-style-type: none"> Indigenous Administration Courses: Continuing Education: Northern Lakes College University of Alberta: Indigenous Canada 				
<p align="center">ORGANIZING IDEA</p> <p>Time and Place: Exploring the dynamic relationships between people, place, and time supports understanding of perspectives and events to make meaning of the world.</p>				
<p align="center">GUIDING QUESTION</p> <p align="center">How do social scientists develop understandings of the world?</p>				
<p align="center">LEARNING OUTCOME</p> <p align="center">Students investigate ways of studying people, places, and events.</p>				
<p>Information can be gathered from a variety of sources to support understandings of relationships between people, events, and land; for example,</p> <ul style="list-style-type: none"> artifacts maps environment timelines images <p>Landscapes, the sky and stars, and plant and animal behaviour can be used to indicate time and provide directional guidance and orientation.</p> <p>Time is measured in different ways based on worldview; for example,</p> <ul style="list-style-type: none"> linear and sequential cyclical and non-linear <p>[continued...]</p>	<p>Social scientists record events and interactions to support understandings of the physical and social world.</p>	<p>Relate different measurements of time to worldview.</p> <p>Develop a chronology of events on a timeline, using CE and BCE.</p> <p>Construct a timeline highlighting the existence of select ancient civilizations and the duration of time passed to the present.</p>	<p> Orienteering Series (4 videos)</p> <p> Place Names</p>	


 Knowledge	Understanding	Skills & Procedures	ᑭᐱᐱᑦ Nehiyaw Ways of Knowing	Other Suggestions
<p>[continued...]</p> <p>Timelines are visual representations of periods of time and events that include features such as</p> <ul style="list-style-type: none"> • a title • a line • events • a scale • dates <p>Dates on a timeline can be grouped into periods.</p> <p>Dates are commonly represented as being from the Common Era, abbreviated as CE, and Before the Common Era, abbreviated as BCE.</p>				
<p>Maps communicate different types of information; for example,</p> <ul style="list-style-type: none"> • climate • political boundaries • physical features <p>Topographic maps provide three-dimensional information about landforms whether natural or constructed.</p> <p>Elements of maps include</p> <ul style="list-style-type: none"> • scale • elevation • latitude lines • longitude lines <p>Absolute location is a standard measurement of exact location, expressed in degrees, using latitude and longitude coordinates.</p> <p>Parallels, including the equator, are equally spaced latitude lines that circle Earth from east to west.</p> <p>Meridians, including the prime meridian, are longitude lines that circle Earth and pass through the North and South Poles.</p>	<p>Maps support interpretations of land use.</p>	<p>Formulate conclusions about places and environmental characteristics, using maps, images, and other representations.</p> <p>Express the sites of ancient cities using absolute location.</p> <p>Develop maps using scale to accurately determine the distance between places.</p> <p>Create a topographical map of a region inhabited by an ancient civilization.</p>		


 Knowledge	Understanding	Skills & Procedures	ᑭᐱᐱᑦ Nehiyaw Ways of Knowing	Other Suggestions
<p>Interpretations of events may vary depending on personal experience, location, time, and worldview.</p> <p>Worldview includes personal beliefs, perspectives, and actions.</p> <p>Historians, archaeologists, anthropologists, and geographers are social scientists who study various sources to develop interpretations about the past, including how people interacted with each other and with the land.</p> <p>Primary sources are original records from the time and place of an event; for example,</p> <ul style="list-style-type: none"> • artifacts • maps • letters • paintings • wampum <p>Secondary sources, such as textbooks, are accounts of events, times, and places based on interpretations and summaries of primary sources.</p> <p>Advancements in technology provide new information about artifacts that may change interpretations of history.</p> <p>Archaeologists study people of the past through artifacts found at historical sites; for example,</p> <ul style="list-style-type: none"> • tools and weapons • pottery, art, symbols, and drawings • skeletal remains and burial sites • jewelry and adornments <p>Anthropologists study groups of people to better understand</p> <ul style="list-style-type: none"> • origins • cultures • beliefs • customs <p>[continued...]</p>	<p>Interpretations of history are informed by multiple perspectives and can evolve through the work of social scientists.</p>	<p>Compare the work of historians, archaeologists, anthropologists, and geographers.</p> <p>Distinguish between primary and secondary sources.</p> <p>Compare information provided by primary and secondary sources.</p> <p>Imagine ways that advancements in technology could change interpretations of history.</p> <p>Analyze the significance of following protocols for archaeologists and anthropologists.</p> <p>Develop actions to balance learning about history through artifacts with repatriating artifacts.</p>		<p>Create a timeline related to residential schools.</p> <p> Orange Shirt Day/Residential Schools: Orange Shirt Day and Beyond from Empowering the Spirit</p> <p> Orange Shirt Day Society: For Teachers</p> <p> Rupertsland Institute: National Day for Truth and Reconciliation</p> <p> Amnesty International: Red Dress Day</p> <p> Moose Hide Campaign</p>


 Knowledge	Understanding	Skills & Procedures	ᑭᓐᓂᓐᓂᓐ Nehiyaw Ways of Knowing	Other Suggestions
<p>[continued...]</p> <p>Historians study and share interpretations of history by building on the findings of previous scholars.</p> <p>Social scientists recognize that civilizations and empires have been built on lands of Indigenous populations around the world.</p>				 Empowering the Spirit: The Kairos Blanket Exercise  The Blanket Exercise: Teaching Tool for Grades 4 to 12
<p>Social scientists use research processes to study people, places, and events.</p> <p>Research processes include</p> <ul style="list-style-type: none"> • formulating questions • gathering and organizing information • drawing and supporting conclusions • communicating findings <p>Researchers determine themes, patterns, and trends, and draw conclusions from information.</p> <p>Researchers cite references, including creator, date, audience, and purpose, to demonstrate the use of reliable and valid sources.</p> <p>Information gathered through research can be used to develop an informed perspective or position related to a topic.</p> <p>Bias can be influenced by personal experience and background knowledge.</p> <p>Remaining neutral can help support coming to more accurate conclusions.</p>	<p>Social science research processes support understanding of perspectives and issues of the past, present, and future.</p>	<p>Design and implement a research project.</p> <p>Evaluate information from a source to draw conclusions.</p> <p>Evaluate information about a source to determine if the source is reliable and valid.</p> <p>Hypothesize steps and action that can be taken to limit bias in research.</p> <p>Apply ethical practices in research to one's work.</p>		 Justice for Aboriginal Peoples -- It's time  Rupertsland Institute: Land Scrip Lesson Plan and Resources


 Knowledge	Understanding	Skills & Procedures	ᑭᐱᐱᑦ Nehiyaw Ways of Knowing	Other Suggestions
GUIDING QUESTION How has geography contributed to the development of civilizations and empires?				
LEARNING OUTCOME Students examine how geographical features and environmental changes contributed to the settlement and trade of ancient civilizations.				
<p>Ancient civilizations were complex societies that existed thousands of years ago (3000 BCE–500 CE) in different locations around the world; for example,</p> <ul style="list-style-type: none"> • Egypt • Greece • Rome • China • India • Arab civilizations <p>Many ancient civilizations grew along major river valleys because the geographical features supported agriculture, including</p> <ul style="list-style-type: none"> • abundance of water • fertile soil • moderate climate • proximity to trade and travel routes <p>Increased agriculture led to a shift from nomadic to settled societies.</p> <p>Regular flooding brought sediment to river valleys, which made the soil good for farming.</p> <p>Some ancient civilizations were established along coastlines because the geographical features supported settlement, including</p> <ul style="list-style-type: none"> • proximity to trade and travel routes and ports • fishing • natural protection provided by the landscape • moderate climate 	<p>Environmental features affect the distribution and movement of people.</p>	<p>Compare the settlement and development of multiple ancient civilizations.</p> <p>Hypothesize locations where ancient civilizations found geographical features necessary to establishing urban areas.</p> <p>Evaluate the opportunities and challenges of establishing settlements along river valleys and coastlines.</p>		


 Knowledge	Understanding	Skills & Procedures	ᑭᐱᐱᑦ Nehiyaw Ways of Knowing	Other Suggestions
<p>Advancements in agriculture, including irrigation and the use of domesticated animals for labour, allowed for more agricultural goods to be produced by fewer people.</p> <p>Urban settlements were created as fewer people engaged in agriculture (surplus labour).</p> <p>Excess agricultural products (surplus goods) were traded for goods and services.</p> <p>River valley civilizations and coastal civilizations developed urban settlements where people had specialized jobs.</p> <p>Economic practices developed in response to the growth of urban centres.</p> <p>Economic practices include</p> <ul style="list-style-type: none"> • exchanging goods at markets • storing valuables in banks • purchasing goods and services with currency • supporting government services with taxation 	<p>Innovations and urbanization contributed to the development of economic practices.</p>	<p>Evaluate the significance of agriculture to the development of ancient civilizations.</p> <p>Evaluate the social, environmental, economic, and political impacts of urbanization.</p> <p>Conclude how the economic practices of today are influenced by those developed in ancient times.</p>		<p>Explore examples of:</p> <ul style="list-style-type: none"> • Treaty reserve locations • Coastal First Nations locations • First Nation communities
<p>Changes in the natural environment can cause people to adapt or move; for example,</p> <ul style="list-style-type: none"> • relocating because a river changes course • building canals and reservoirs to manage flood waters • migrating because of drought • building seawalls to hold back rising water • rebuilding after a volcanic eruption <p>Changes can be made to the natural environment by people to meet needs; for example,</p> <ul style="list-style-type: none"> • building irrigation canals to provide water for crops • building aqueducts to transport water • using reservoirs to store water • using terrace farming to increase growing area • building walls and barricades to provide protection for people <p>[continued...]</p>	<p>There is a reciprocal relationship between people and the environment.</p>	<p>Analyze the effects of environmental changes on human settlements and migration.</p> <p>Evaluate diverse ways in which various ancient civilizations changed the natural environment to meet needs.</p> <p>Evaluate the intended and unintended consequences of making changes to the natural environment.</p>		<p>Explore the understanding as a First Nations worldview.</p>






 Knowledge	Understanding	Skills & Procedures	ᑭᐱᐱᑦ Nehiyaw Ways of Knowing	Other Suggestions
<p>[continued...]</p> <p>Changes people make to the natural environment can have consequences for people and the land; for example,</p> <ul style="list-style-type: none"> clearing trees can provide land for agriculture and lead to soil erosion damming rivers can store water in one place but lead to droughts downstream overharvesting can lead to depletion of resources 				
ORGANIZING IDEA Systems: Evaluating processes and structures of organizations builds understanding of decision making in the world.				
GUIDING QUESTION How did power and control contribute to civilizations and empires?				
LEARNING OUTCOME Students examine government systems and organization of civilizations and empires.				
<p>Advances in technology, such as machines, marked an end of ancient civilizations and allowed new civilizations, empires, and dynasties to emerge.</p> <p>Civilizations have advanced technologies and complex social structures.</p> <p>Empires have central governments that rule over a larger territory, often with a strong military.</p> <p>Dynasties are led by a ruling family over a prolonged time and may also be classified as civilizations or empires.</p> <p>Technological innovations contributed to the success of civilizations and empires; for example,</p> <ul style="list-style-type: none"> writing systems architecture calendars currency aqueducts metallurgy <p>[continued...]</p>	<p>Technological advancements and interactions resulted in social, political, economic, and environmental transformations of civilizations and empires.</p>	<p>Analyze the impacts of innovations on the growth and expansion of a civilization or empire.</p> <p>Identify civilizations, empires, and dynasties along water-based and land-based trade routes.</p> <p>Debate whether a water-based or land-based trade route is preferred.</p> <p>Imagine a new way to trade and transport goods that reduces or removes challenges faced by traditional trade routes.</p> <p>[continued...]</p>		



 Knowledge	Understanding	Skills & Procedures	ᑭᐱᐱᑦ Nehiyaw Ways of Knowing	Other Suggestions
<p>[continued...]</p> <p>As civilizations and empires grew, extensive networks of land-based and water-based trade routes developed; for example,</p> <ul style="list-style-type: none"> • the trans-Saharan trade route • the Royal Road • the Silk Road <p>Trade routes provided opportunities to exchange goods over great distances, increasing the variety of products available in places around the world.</p> <p>International trade increased contact between civilizations and empires, which allowed for the spread of cultures, innovations, and ideas; for example,</p> <ul style="list-style-type: none"> • religions and belief systems • gunpowder • medicine • food and spices • worldviews <p>People who travelled on trading routes faced challenges; for example,</p> <ul style="list-style-type: none"> • rugged terrain • rough seas • extreme climates • bandits and pirates • political unrest <p>Taxes first developed in ancient societies.</p> <p>A tax is an amount collected by the government.</p> <p>The government uses taxes to provide services for the community; for example,</p> <ul style="list-style-type: none"> • police • health care • education • defence 		<p>[continued...]</p> <p>Examine how taxes are collected and used in the local community.</p> <p>Develop a tax regime and then debate and decide how the tax proceeds will be used.</p>		<p>Examine trading routes in relation to the fur trade.</p>







 Knowledge	Understanding	Skills & Procedures	ᑭᐱᐱᑦ Nehiyaw Ways of Knowing	Other Suggestions
<p>As the population and territory of a civilization expand, complex organizational systems develop; for example,</p> <ul style="list-style-type: none"> governments legal systems class structures economic systems <p>Governments can be studied by comparing common features, including</p> <ul style="list-style-type: none"> leadership decision-making processes ways laws are enforced level of participation by the population <p>Most civilizations and empires had authoritarian governments in which decisions were made by one ruler, or a small group of rulers, with limited or no participation by the population.</p> <p>Types of authoritarian government systems include</p> <ul style="list-style-type: none"> oligarchies monarchies dictatorships <p>Authoritarian leaders may claim power through</p> <ul style="list-style-type: none"> divinity rights (divine right of kings, mandate of heaven) heredity force <p>People follow authoritarian leaders for a variety of reasons, including tradition, a desire for stability, or fear.</p>	<p>Power, authority, and decision making in most civilizations and empires was authoritarian.</p>	<p>Critique opportunities and challenges with authoritarian rule.</p> <p>Compare government decision-making processes in different civilizations and empires.</p> <p>Compare and contrast the varied decision-making structures and features of authoritarian governments.</p>		
<p>Civilizations and empires often establish a hierarchical social class structure in which</p> <ul style="list-style-type: none"> a small number of people occupy the highest social class with the most power, privilege, rights, and freedoms a large number of people occupy lower social classes with less power and privilege and fewer rights and freedoms <p>[continued...]</p>	<p>Civilizations and empires maintained power and control through social structures.</p>	<p>Compare and contrast how social class structures in ancient civilizations are different from structures today.</p> <p>Evaluate opportunities and challenges within different social classes.</p> <p>[continued...]</p>		

 Knowledge	Understanding	Skills & Procedures	ᑭᐱᐱᑦ Nehiyaw Ways of Knowing	Other Suggestions
<p>[continued...]</p> <p>Social class refers to a group of people within a society who share the same status based on criteria; for example,</p> <ul style="list-style-type: none"> • heredity • wealth • occupation • education <p>Social mobility was often limited by social class.</p> <p>Many civilizations and empires enslaved people who</p> <ul style="list-style-type: none"> • were viewed as the property of another person and had no power, privilege, or rights • occupied the lowest social class with very limited rights or freedoms <p>Civilizations and empires that assign rights, responsibilities, and privileges based on gender can be described as</p> <ul style="list-style-type: none"> • patriarchal, when practices favour males • matriarchal, when practices favour females • egalitarian, when practices treat males and females equally <p>Social class structures varied in civilizations and empires around the world; for example,</p> <ul style="list-style-type: none"> • the Varna system in ancient India • the rule of merit (meritocracy) of the Han dynasty in China • the Elizabethan era Chain of Being • the egalitarian gender rights in ancient Persia 		<p>[continued...]</p> <p>Evaluate opportunities for social mobility in a civilization or empire.</p> <p>Compare and contrast the roles of males and females in a civilization or empire.</p>		<p>Examine First perspectives on the roles of males and females.</p>

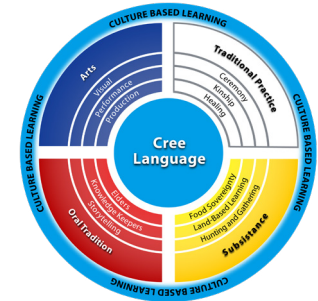
 Knowledge	Understanding	Skills & Procedures	ᑭᐱᐱᑦ Nehiyaw Ways of Knowing	Other Suggestions
GUIDING QUESTION What factors contributed to the success of some empires and civilizations and the decline of others?				
LEARNING OUTCOME Students compare the evolution of civilizations and empires.				
<p>The rise of civilizations and empires depends on internal and external factors; for example,</p> <ul style="list-style-type: none"> • organized structures • strong leadership • military power • innovations • wealth • opportunity <p>Empires grew through trade and military conquest, and took over more land; for example,</p> <ul style="list-style-type: none"> • Persia • Rome • Greece • Arab <p>The decline of civilizations and empires is caused by internal and external factors; for example,</p> <ul style="list-style-type: none"> • environmental changes • rebellions • expenses • struggles for power and leadership • changes to values and belief systems • war and military conquest <p>African empires experienced economic disputes that resulted in the end of some empires and the beginning of others; for example,</p> <ul style="list-style-type: none"> • Kush and Axum • Ghana, Mali, and Songhai • Ife and the kingdom of Benin <p>[continued...]</p>	<p>Internal and external factors led to the decline of some civilizations and empires and to the strengthening and growth of others.</p>	<p>Determine the internal and external factors that led to the rise and decline of a civilization or empire.</p> <p>Compare continuity and change in civilizations and empires, using maps.</p> <p>Imagine ways to reduce or remove a common internal or external factor that traditionally contributed to the decline of civilizations.</p> <p>Compare patterns of the rise and decline of civilizations and empires in different parts of the world.</p> <p>Analyze the effects the establishment of colonies and empires can have on Indigenous populations.</p>		<p>Examine effects of residential schools.</p>








 Knowledge	Understanding	Skills & Procedures	ᑭᓴᓴᑦ Nehiyaw Ways of Knowing	Other Suggestions
<p>[continued...]</p> <p>Struggles for power and leadership resulted in the end of many different Asian empires; for example,</p> <ul style="list-style-type: none"> • the Ottoman Empire • the Russian Empire • the Mongol Empire • the Mughal Empire • the Maratha Empire <p>Through colonization, external powers took control of land, resources, and trade from Indigenous people around the world, with varying results; for example,</p> <ul style="list-style-type: none"> • the Aztecs • the Inca • the Maya 				<p>Examine effects on Canadian First Nations and Métis.</p>
ORGANIZING IDEA Citizenship: Understanding local, national, and global issues empowers individual and collective action toward an inclusive society.				
GUIDING QUESTION How does the study of civilizations and empires inform understanding of the world?				
LEARNING OUTCOME Students examine how the legacies of civilizations and empires continue to influence people, places, and events around the world.				
<p>Recognizing the complexity of diverse perspectives and issues from the past helps promote understanding of self and others in the present.</p> <p>The study of civilizations and empires contributes to understanding of complex contemporary issues; for example,</p> <ul style="list-style-type: none"> • how technology created turning points in history • how economics influenced exploration and trade • the successes and failures of systems of government • different beliefs, spiritualities, and religious systems • the intended and unintended consequences of intercultural contact • how worldviews compete <p>[continued...]</p>	<p>Knowledge of the past, including about civilizations and empires, can be used to understand contemporary global issues, opportunities, and challenges.</p>	<p>Analyze contributions of civilizations and empires that are part of contemporary life.</p> <p>Investigate how study of civilizations and empires supports understanding of contemporary issues and events.</p> <p>Argue the importance of an enduring legacy of an ancient civilization.</p>	<p>  Fire Teachings (continuing environmental influences)</p>	<p>Investigate the legacy of residential schools.</p> <p>  Examine the Articles of the United Nations Declaration on the Rights of Indigenous Peoples.</p>

 Knowledge	Understanding	Skills & Procedures	ᑭᐱᑭᑦ Nehiyaw Ways of Knowing	Other Suggestions
<p>[continued...]</p> <p>Structures, systems, ideas, and innovations that originated in earlier times evolved to meet the needs and wants of contemporary populations.</p> <p>The enduring legacies of civilizations and empires are still evident today; for example,</p> <ul style="list-style-type: none"> • art and architecture • astronomy • medicine • mathematics and science • writing systems • philosophy and literature • government structures • international trade routes • social hierarchies • beliefs, spiritualities, and religious systems 				
GUIDING QUESTION How can citizens become active and informed?				
LEARNING OUTCOME Students investigate ways to learn about the world and take action for change.				
<p>Informed citizenship involves seeking information from different sources and comparing perspectives on issues and events.</p> <p>[continued...]</p>	<p>Recognizing diverse perspectives of people, places, and events can inform actions.</p>	<p>Assess current global events and their impacts in different areas of the world.</p> <p>Connect current events to prior knowledge and personal experiences.</p> <p>[continued...]</p>		 <p>Project of Heart: Teacher Guides and Lesson Plans</p>

 Knowledge	Understanding	Skills & Procedures	ᑭᐱᐱᑦ Nehiyaw Ways of Knowing	Other Suggestions
<p>[continued...]</p> <p>Investigating events and issues from multiple perspectives and sources can</p> <ul style="list-style-type: none"> • support recognition of multiple interpretations of the same event • develop empathy for the actions and values of others • increase the accuracy, validity, and reliability of information • spark dialogue about related historical and contemporary issues • support understanding of short- and long-term causes and consequences • influence responses to local, provincial, national, and global events and issues <p>Informed citizens are aware of and respond to issues and events in many ways; for example,</p> <ul style="list-style-type: none"> • by sharing information • by collecting donations • by volunteering • by changing personal behaviour 		<p>[continued...]</p> <p>Develop conclusions about a current event or personal interest, using information from a variety of reliable sources.</p> <p>Analyze the perspectives and experiences of people directly involved in a current event of global significance.</p> <p>Assess the complexities of a significant local or provincial current event.</p> <p>Justify responsive actions to a current event of personal interest or significance.</p>		<p>Use Project of Heart as an example of a social justice project and develop a project around a topic such as residential schools and Orange Shirt Day.</p> <p> Orange Shirt Day/Residential Schools: Orange Shirt Day and Beyond from Empowering the Spirit</p> <p> Orange Shirt Day Society: For Teachers</p> <p> Rupert's Institute: National Day for Truth and Reconciliation</p> <p> Amnesty International: Red Dress Day</p> <p> Moose Hide Campaign</p>

Math



 Knowledge	Understanding	Skills & Procedures	 Nehiyaw Ways of Knowing	Other Suggestions
ORGANIZING IDEA NUMBER: Quantity is measured with numbers that enable counting, labelling, comparing, and operating.				
GUIDING QUESTION How can the infinite nature of place value enhance insight into number?				
LEARNING OUTCOME 5N1 Students analyze patterns in place value.				
<p>A number expressed with more decimal places is more precise.</p> <p>A zero in the rightmost place of a decimal number does not change the value of the number.</p> <p>There are infinitely many decimal numbers between any two decimal numbers.</p>	<p>Place value symmetry extends infinitely to the left and right of the one's place.</p>	<p>Relate the names of place values that are the same number of places to the left and right of the ones place.</p> <p>Express numbers within 10 000 000, including decimal numbers to thousandths, using words and numerals.</p> <p>Relate a decimal number to its position on the number line.</p> <p>Determine a decimal number between any two other decimal numbers.</p> <p>Compare and order numbers, including decimal numbers.</p> <p>Express the relationship between two numbers, including decimal numbers, using $<$, $>$, or $=$.</p> <p>Round numbers, including decimal numbers, to various places according to context.</p>	<p>  Legend of Night and Day</p> <p>  13 Moons</p> <p> Distance – Concept of Zero</p>	<p>Zero is not represented in the Cree Language. However, “no more, all gone - mukway” is represented.</p>



Knowledge

Understanding

Skills & Procedures

 Neihyaw
Ways of Knowing

Other Suggestions

GUIDING QUESTION

In what ways can the processes of addition and subtraction be articulated?

LEARNING OUTCOME

5N2 Students add and subtract within 1 000 000, including decimal numbers to thousandths, using standard algorithms.

Standard algorithms are efficient procedures for addition and subtraction.

Addition and subtraction of numbers with many digits is facilitated by standard algorithms.

Add and subtract numbers, including decimal numbers, using standard algorithms.

Assess the reasonableness of a sum or difference by estimating.

Solve problems using addition and subtraction, including problems involving money.

 **The Legend of Weasel**

Examine animal populations within the area. Obtain numbers from Fish and Wildlife.

GUIDING QUESTION

In what ways can divisibility characterize natural numbers?

LEARNING OUTCOME

5N3 Students determine divisibility of natural numbers.

A divisibility test can be used to determine factors of a natural number.

Division by zero is not possible.





A number is divisible by another number if it can be divided with a remainder of 0.

Investigate divisibility by natural numbers to 10, including 0.

Generalize divisibility tests for 2, 3, and 5.

Determine factors of natural numbers using divisibility test.

 **Beading (loom)**

 Knowledge	Understanding	Skills & Procedures	 Nehiyaw Ways of Knowing	Other Suggestions
GUIDING QUESTION				
In what ways can the processes of multiplication and division be articulated?				
LEARNING OUTCOME				
5N4 Students multiply and divide natural numbers within 100 000, including with standard algorithms.				
<p>Multiplication and division of numbers with many digits is facilitated by standard algorithms.</p>	<p>Standard algorithms are efficient procedures for multiplication and division.</p>	<p>Explain the standard algorithms for multiplication and division of natural numbers.</p> <p>Multiply up to 3-digit by 2-digit natural numbers using standard algorithms.</p> <p>Divide 3-digit by 1-digit natural numbers using standard algorithms.</p> <p>Express a quotient with or without a remainder according to context.</p> <p>Assess the reasonableness of a product or quotient using estimation.</p> <p>Solve problems using multiplication and division of natural numbers.</p>	<p> Beading (loom)</p> <p> Mixing and Measuring Common Medicines (2 videos)</p>	<p>Create or modify existing word problems to be culturally relevant. For example, with stories about beaver hunting, divide number of hunters by beavers and pelts; including how much different quantities were sold for.</p>
GUIDING QUESTION				
In what ways can fractions communicate numbers greater than one?				
LEARNING OUTCOME				
5N5 Students interpret improper fractions.				
<p>A fraction can represent quantities greater than one.</p> <p>An improper fraction has a numerator that is greater than its denominator.</p> <p>Natural numbers can be expressed as improper fractions with a denominator of 1.</p> <p>A mixed number of the form $A\frac{b}{c}$ is composed of a number of wholes, A, and a fractional part, $\frac{b}{c}$, can represent an improper fraction.</p>	<p>Fractions allow counting and measuring between whole quantities.</p> <p>Improper fractions and mixed numbers that represent the same number are associated with the same point on the number line.</p>	<p>Relate fractions, improper fractions, and mixed numbers to their positions on the number line.</p> <p>Count beyond 1 using fractions with the same denominator.</p> <p>Model fractions, including improper fractions and mixed numbers, using quantities, lengths, and areas.</p> <p>Express improper fractions and mixed numbers symbolically.</p> <p>Express an improper fraction as a mixed number and vice versa.</p> <p>Compare fractions, including improper fractions and mixed numbers, to benchmarks of 0, 1/2 and 1.</p>		<p>Explore moose distribution amongst families. For example, if two moose have been harvested, how much will each of 3 families receive?</p>



Knowledge

Understanding

Skills & Procedures

 Nehiyaw
Ways of Knowing

Other Suggestions

GUIDING QUESTION

How can the composition of fractions facilitate operating with fractions?

LEARNING OUTCOME

5N6 Students add and subtract fractions with common denominators.

Fractions with common denominators can be composed or decomposed to model the change in a quantity of unit fractions.

Addition and subtraction of fractions with common denominators does not change the unit fraction from which they are composed.

Fractions greater than one can be added or subtracted as mixed numbers or improper fractions.

Fractions with common denominators are multiples of the same unit fraction.

Properties for addition and subtraction of natural numbers apply to fractions.

Investigate the composition and decomposition of a quantity within 1 using unit fractions.

Express the composition or decomposition of fractions with common denominators as a sum or difference.

Compare strategies for adding or subtracting improper fractions to strategies for adding or subtracting mixed numbers.

Add and subtract fractions with common denominators within 100, including improper fractions and mixed numbers.

Solve problems requiring addition and subtraction of fractions with common denominators, including improper fractions and mixed numbers.

Legend of Night and Day
 13 Moons
 Legend of Solstice

Use culturally relevant recipes (e.g., bannock, berries) the number of people there are to find common denominators.

GUIDING QUESTION

How can ratios provide new ways to relate numbers?

LEARNING OUTCOME

5N7 Students employ ratios to represent relationships between quantities.

A ratio can express part-part or part-whole relationships between two countable or measurable quantities.

A ratio can be expressed with a fraction or with a colon.

A percentage represents a part-whole ratio that compares a quantity to 100.


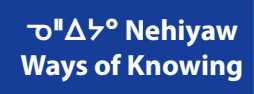


A ratio is a comparison of two quantities in a specific situation.

Fractions, decimals, ratios, and percentages can represent the same part-whole relationship.

Express part-part ratios and part-whole ratios of the same whole to describe various situations.

Express, symbolically, the same part-whole relationship as a ratio, fraction, decimal, and percentage.

7 Year Cycle
 How Rabbit Came to Be

 Knowledge	Understanding	Skills & Procedures	 Nehiyaw Ways of Knowing	Other Suggestions
ORGANIZING IDEA				
PATTERNS: Awareness of patterns supports problem solving in various situations.				
GUIDING QUESTION				
How might representation of a sequence provide insight into change?				
LEARNING OUTCOME				
5P1 Students relate position and terms of an arithmetic sequence.				
<p>A table of values representing an arithmetic sequence lists the position in the first column or row and the corresponding term in the second column or row.</p> <p>Points representing an arithmetic sequence on a coordinate grid fit on a straight line.</p> <p>An algebraic expression can describe the relationship between the positions and terms of an arithmetic sequence.</p>	<p>Each term of an arithmetic sequence corresponds to a natural number indicating position in the sequence.</p>	<p>Represent one-to-one correspondence between positions and terms of an arithmetic sequence in a table of values and on a coordinate grid.</p> <p>Describe the graph of an arithmetic sequence as a straight line.</p> <p>Describe a rule, limited to one operation, that expresses correspondence between positions and terms of an arithmetic sequence.</p> <p>Write an algebraic expression, limited to one operation, that represents correspondence between positions and terms of an arithmetic sequence.</p> <p>Determine the missing term in an arithmetic sequence that corresponds to a given position.</p> <p>Solve problems involving an arithmetic sequence.</p>	<p> Beading</p>	<p> Project WILD Activity – Oh! Deer</p>



Knowledge

Understanding

Skills & Procedures

 Nehiyaw
Ways of Knowing

Other Suggestions

ORGANIZING IDEA

ALGEBRA: Equations express relationships between quantities.

GUIDING QUESTION

How can expressions enhance communication of number?

LEARNING OUTCOME

5A1.1 Students interpret numerical and algebraic expressions.

Numerical expressions with multiple operations may include parentheses to group numbers and operations.

The conventional order of operations includes performing operations in parentheses before other operations.

Numerical expressions represent a quantity of known value.

Parentheses change the order of operations in a numerical expression.

Evaluate numerical expressions involving addition or subtraction in parentheses according to the order of operations.



Aboriginal Games: A Cross Curricular Unit Plan: Antler Button Basket Toss Game Lesson



Traditional Indigenous Games: Antler Button Basket Toss Game at 1.25 minutes)

LEARNING OUTCOME

5A1.2 Students interpret numerical and algebraic expressions.

Expressions that include variables are called algebraic expressions.

A variable can be interpreted as a specific unknown value and is represented symbolically with a letter.

Products with variables are expressed without the multiplication sign.

Quotients with variables are expressed using fraction notation.

An algebraic term is the product of a number, called a coefficient, and a variable.

[continued...]

Algebraic expressions use variables to represent quantities of unknown value.

Algebraic expressions may be composed of one algebraic term or the sum of algebraic and constant terms.

Relate repeated addition of a variable to the product of a number and a variable.


Express the product of a number and a variable using a coefficient.

Express the quotient of a variable and a number as a fraction.

Recognize a product with a variable, a quotient with a variable, or a number as a single term.

Write an algebraic expression involving one or two terms to describe an unknown value.

Evaluate an algebraic expression by substituting a given number for the variable.

 Knowledge	Understanding	Skills & Procedures	ᑭᐱᑭᑦ Nehiyaw Ways of Knowing	Other Suggestions
[continued...]				
<p>A constant term is a number.</p> <p>A variable can be replaced by a given number in order to evaluate an expression.</p>				
LEARNING OUTCOME 5A1.3 Students interpret numerical and algebraic expressions.				
<p>The process of applying inverse operations can be used to solve an equation.</p> <p>The value of the variable obtained by solving an equation is the solution.</p>	<p>Equality is preserved by applying inverse operations to algebraic expressions on each side of an equation.</p> <p>The expressions on each side of an equation will be equal when evaluated using the correct solution.</p>	<p>Write equations involving one or two operations to represent a situation.</p> <p>Investigate order of operations when performing inverse operations on both sides of an equation.</p> <p>Apply inverse operations to solve an equation, limited to equations with one or two operations.</p> <p>Verify the solution to an equation by evaluating expressions on each side of the equation.</p> <p>Solve problems using equations, limited to equations with one or two operations.</p>		



Knowledge

Understanding

Skills & Procedures

ᑭᐱᑭᑦ Nehiyaw
Ways of Knowing

Other Suggestions

ORGANIZING IDEA

MEASUREMENT: Attributes such as length, area, volume, and angle are quantified by measurement.

GUIDING QUESTION

In what ways can area be communicated?

LEARNING OUTCOME

5M1 Students estimate and calculate area using standard units.

Area is expressed in the following standard units, derived from standard units of length:

- square centimetres
- square metres
- square kilometres

A square centimetre (cm^2) is an area equivalent to the area of a square measuring 1 centimetre by 1 centimetre.

A square metre (m^2) is an area equivalent to the area of a square measuring 1 metre by 1 metre.

A square kilometre (km^2) is an area equivalent to the area of a square measuring 1 kilometre by 1 kilometre.

Among all rectangles with the same area, the square has the least perimeter.

Area can be expressed in various units according to context and desired precision.

Rectangles with the same area can have different perimeters.

Relate a centimetre to a square centimetre.

Relate a metre to a square metre.

Relate a square centimetre to a square metre.

Express the relationship between square centimetres, square metres, and square kilometres.

Justify the choice of square centimetres, square metres, or square kilometres as appropriate units to express various areas.

Estimate an area by comparing to a benchmark of a square centimetre or square metre.

Express the area of a rectangle using standard units given the lengths of its sides.

Compare the perimeters of various rectangles with the same area.

Describe the rectangle with the least perimeter for a given area.





Solve problems involving perimeter and area of rectangles.

Integrate with activities such as designing gardens for food sovereignty (for community use); building traps and stretcher racks for different animals.

Moose population density practices; tree counts.




Alberta Native Friendship Centres Association & Be Fit For Life Network: Move & Play Through Traditional Games (Run and Scream game) Estimate and measure the distance one student can run, the distance the whole class can run.

 Knowledge	Understanding	Skills & Procedures	 Nehiyaw Ways of Knowing	Other Suggestions
ORGANIZING IDEA GEOMETRY: Shapes are defined and related by geometric attributes.				
GUIDING QUESTION In what ways might symmetry characterize shape?				
LEARNING OUTCOME 5G1.1 Students investigate symmetry as a geometric property.				
<p>A 2-D shape has reflection symmetry if there is a line over which the shape reflects and the two halves exactly match.</p> <p>A 3-D shape has reflection symmetry if there is a plane over which the shape reflects and the two halves exactly match.</p> <p>A 2-D shape has rotational symmetry if it exactly overlaps itself one or more times within a rotation of 360° around its centre point.</p> <p>Order of rotation symmetry describes the number of times a shape coincides with itself within a rotation of 360° around its centre point.</p> <p>Central symmetry is the rotational symmetry by 180°.</p> <p>The straight line that connects a point with its image in the central symmetry passes through the centre of rotation.</p> <p>[continued...]</p>	<p>Symmetry is a property of shapes.</p> <p>Symmetry can be created and can occur in nature.</p>	<p>Recognize symmetry in nature.</p> <p>Recognize symmetry in First Nations, Métis, and Inuit design.</p> <p>Investigate symmetry in familiar 2-D and 3-D shapes using hands-on materials or digital applications.</p> <p>Show the line of symmetry of a 2-D shape.</p> <p>Describe the order of rotation symmetry of a 2-D shape.</p>	<p> Beading</p>	<p>Symmetry in nature such as trees, leaves, flowers, butterflies, fruit, snowflakes, insects, etc.</p> <p>Symmetry in design such as birch bark biting, beading, clothing, Aztec design, pyramids.</p> <p> Shared Learnings: Integrating BC Aboriginal Content K-10: Page 134-136. Symmetry: "The Butterfly."</p>



Knowledge	Understanding	Skills & Procedures	ᑭᐱᑦᑭᐱᑦ Nehiyaw Ways of Knowing	Other Suggestions
<p>[continued...]</p> <p>Symmetry can be found in First Nations, Métis, and Inuit design, including</p> <ul style="list-style-type: none"> • Basket weavings • Wampum belts • Quilts • First Nations beadwork or Métis floral beadwork • Architecture such as tipis or longhouses 				
<p>LEARNING OUTCOME</p> <p>5G1.2 Students investigate symmetry as a geometric property.</p>				
<p>In a regular polygon, the number of sides equals the number of reflection symmetries and the number of rotation symmetries.</p> <p>A circle has infinitely many reflection and rotation symmetries.</p>	<p>Symmetry is related to other geometric properties.</p>	<p>Compare the number of reflection and rotation symmetries of a 2-D shape to the number of equal sides and angles.</p> <p>Classify 2-D shapes according to the number of reflection or rotation symmetries.</p>		

 Knowledge	Understanding	Skills & Procedures	ᑭᐱᑭᑦ Nehiyaw Ways of Knowing	Other Suggestions
ORGANIZING IDEA				
COORDINATE GEOMETRY: Location and movement of objects in space can be communicated using a coordinate grid.				
GUIDING QUESTION				
How can location enhance the ways in which space is defined?				
LEARNING OUTCOME				
CG1 Students relate location to position on a grid.				
<p>Coordinate grids use coordinates to indicate the location of the point where the vertical and horizontal grid lines intersect.</p> <p>Coordinates are ordered pairs of numbers in which the first number indicates the distance from the vertical axis and the second number indicates the distance from the horizontal axis.</p> <p>Positional language includes</p> <ul style="list-style-type: none"> • left • right • up • down 	<p>Location can describe the position of shapes in space.</p> <p>Location can be described precisely using a coordinate grid.</p>	<p>Locate a point on a coordinate grid given the coordinates of the point.</p> <p>Describe the location of a point on a coordinate grid using coordinates.</p> <p>Describe the location of a point on a coordinate grid in relation to the location of another point using positional language.</p> <p>Model a polygon on a coordinate grid using coordinates to indicate the vertices.</p> <p>Describe the location of the vertices of a polygon on a coordinate grid using coordinates.</p>		



Knowledge

Understanding

Skills & Procedures

 ᑭᐱᑭᑦ Nehiyaw
Ways of Knowing

Other Suggestions

ORGANIZING IDEA

STATISTICS: The science of collecting, analyzing, visualizing, and interpreting data can inform understanding and decision making.

GUIDING QUESTION

How might frequency bring meaning to data?

LEARNING OUTCOME

5ST1.1 Students analyze frequency in categorical data.

Frequency can be compared across categories to answer statistical questions.

The mode is the category with the highest frequency.

Frequency is a count of categorized data, but it is not the data value itself.

Examine categorized data in tables and graphs.

Determine frequency for each category of a set of data by counting individual data points.

Identify the mode in various representations of data.

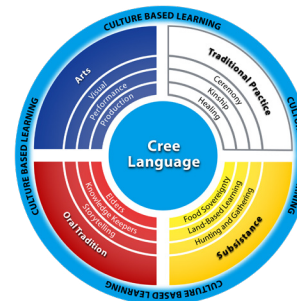
Recognize data sets with no mode, one mode, or multiple modes.







Justify possible answers to a statistical question using mode.












Alberta Native Friendship Centres Association & Be Fit For Life Network: Move & Play Through Traditional Games (Run and Scream game) Estimate and measure the distance one student can run, the distance the whole class can run. Graph the results with bar graph, dot plots, circle graph.




Science









 Knowledge	Understanding	Skills & Procedures	ᑭᐱᐱᑦ Nehiyaw Ways of Knowing	Other Suggestions
 VIDEOS Animate and Inanimate (Throughout Environment) (This video is recommended for viewing at the beginning of science units.)				
ORGANIZING IDEA Matter(M) : Understandings of the physical world are deepened through investigating matter and energy.				
GUIDING QUESTION How can states of matter and other physical properties be explained using the particle model of matter?				
LEARNING OUTCOME 5M 1.1 Students investigate the particle model of matter to describe the physical properties of solids, liquids, and gases.				
<p>Ideas represented by the particle model of matter include that:</p> <ul style="list-style-type: none"> • all matter is made up of small particles • particles of matter are always moving • particles of matter have spaces between them <p>In solids, the particles are close together and vibrate in place.</p> <p>In liquids, the particles are separated by spaces and can slide past each other.</p> <p>In gases, the particles are separated by large spaces and are constantly moving in all directions.</p> <p>Attractive forces between particles are strongest in solids and weakest in gases.</p>	<p>The particle model of matter explains the behaviour of particles in matter.</p>	<p>Represent solids, liquids, and gases using the particle model of matter.</p> <p>Relate the movement and arrangement of particles to the state of matter.</p> <p>Describe the impact that attractive forces have on the movement and arrangement of particles in solids, liquids, and gases.</p>	<p> Fall Fire Making and Safety Series: Different Wood/ Trees and How They Burn</p> <p> Winter Fishing: Ice Fishing Series (3 videos)</p> <p>  Creation Stories: Plant Features Legends</p>	<p>Ice fishing (ice density)</p>



 Knowledge	Understanding	Skills & Procedures	ᑭᑭᑭᑭ Nehiyaw Ways of Knowing	Other Suggestions
LEARNING OUTCOME				
5M 1.2 Students investigate the particle model of matter to describe the physical properties of solids, liquids, and gasses.				
<p>Physical properties of matter include</p> <ul style="list-style-type: none"> • state • mass • volume • density • compressibility <p>Mass is the amount of matter in a solid, liquid, or gas.</p> <p>SI units of mass include grams and kilograms.</p> <p>Volume is the amount of space a solid, liquid, or gas takes up.</p> <p>SI units of volume of a liquid include millilitres and litres.</p> <p>SI units are abbreviated for convenience, including</p> <ul style="list-style-type: none"> • g: grams • kg: kilograms • mL: millilitres • L: litres <p>Density is a comparison of the mass of a solid, liquid, or gas to its volume.</p> <p>The greater the mass of a solid, liquid, or gas as compared to its volume, the higher its density.</p> <p>Density can be described comparatively using the phrases denser and less dense.</p> <p>Density can be directly compared by determining</p> <ul style="list-style-type: none"> • the relative mass of objects with the same volume • if a liquid sinks or floats when added to another liquid <p>A solid, liquid, or gas that is less dense than the fluid in which it is placed will float.</p> <p>Compressibility is the ability of a liquid or gas to reduce in volume when under pressure.</p>	<p>The movement and arrangement of particles affect the physical properties of matter.</p>	<p>Measure the mass of solids and liquids using a balance scale and SI units.</p> <p>Measure the volume of liquids using appropriate instruments and SI units.</p> <p>Directly compare the density of solid objects that have the same volume.</p> <p>Directly compare the density of liquids.</p> <p>Relate densities of solids, liquids, and gases using the particle model of matter.</p> <p>Compare the compressibility of air and water.</p> <p>Practise safe and appropriate use of materials, tools, and equipment.</p>	<p>  Mixing and Measuring Common Medicines (2 videos)</p> <p> Making Dry Meat Series (6 videos)</p> <p>  How Medicines Came to Man</p> <p>   Fall Whitefish Series (2 videos)</p>	<p>Explore different food security and storage methods for mobility, space, and safety.</p>






Knowledge	Understanding	Skills & Procedures	ᑭᓴᓴᑦ Nehiyaw Ways of Knowing	Other Suggestions
ORGANIZING IDEA Energy (E): Understandings of the physical world are deepened through investigating matter and energy.				
GUIDING QUESTION How are forces similar and different in water and air?				
LEARNING OUTCOME 5E 1.1 Students investigate and compare how forces affect living things and objects in water and air.				
<p>Thrust and drag are opposing forces.</p> <p>Lift and weight are opposing forces.</p> <p>Thrust is a force that can act in the direction of movement.</p> <p>Drag is a force that can act in opposition to the direction of movement.</p> <p>Lift is an upward force that acts to overcome the weight of a living thing or object and hold it in the air.</p> <p>Weight is a force caused by gravity that acts on a living thing or object in a downward direction.</p> <p>Forces can affect the flight of living things and objects in various ways, including</p> <ul style="list-style-type: none"> • speed • horizontal and vertical movement • altitude • straight and level flight <p>Traditional technologies developed by diverse cultures that reflect understanding of forces that affect flight include the</p> <ul style="list-style-type: none"> • bow and arrow • slingshot • fishing spear 	<p>Flight of living things and objects is influenced by opposing forces.</p>	<p>Diagram opposing forces that act on living things or objects in flight.</p> <p>Explain the effects of thrust and drag on the flight of living things and objects.</p> <p>Explain the effects of lift and weight on the flight of living things and objects.</p> <p>Observe living things and objects in flight.</p> <p>Describe traditional or modern technologies developed by diverse cultures that reflect understanding of forces that affect flight.</p> <p>Construct a device that can fly.</p> <p>Practise safe and appropriate use of tools, equipment, and materials while constructing a device.</p>	<p>  7 Sisters Legend (Girl That Climbed The Sky)</p> <p> Trickster and the Ducks</p>	




 Knowledge	Understanding	Skills & Procedures	ᑭᐱᑦᑎᑦ Nehiyaw Ways of Knowing	Other Suggestions
LEARNING OUTCOME				
5E 1.2 Students investigate and compare how forces affect living things and objects in water and air.				
<p>Buoyant force is an upward force exerted by a fluid that opposes the weight of anything placed in the fluid.</p> <p>When the buoyant force is greater than the weight of an object, the object will float.</p> <p>When the buoyant force is less than the weight of an object, the object will sink.</p> <p>Fluids include liquids and gases.</p>	<p>The relationship between buoyant force and gravity can be used to explain the behaviour of an object in water.</p>	<p>Relate buoyant force and weight to the tendency to float or sink in water.</p> <p>Conduct controlled experiments to determine if various objects and materials float in different fluids.</p> <p>Construct a device that can float.</p> <p>Practise safe and appropriate use of tools, equipment, and materials while constructing a device.</p>	<p> Winter Fishing: Ice Fishing Series (3 videos)</p> <p> Trickster and the Ducks</p>	<p>Build a canoe from birch.</p>
GUIDING QUESTION How are energy resources understood?				
LEARNING OUTCOME 5E 2.1 Students investigate and analyze various energy resources.				
<p>Energy resources are renewable or non-renewable.</p> <p>Renewable energy resources are not depleted over time as they can be naturally replenished if handled responsibly.</p> <p>Renewable energy resources include</p> <ul style="list-style-type: none"> • solar • wind • biomass • geothermal • tidal • water and hydro <p>Non-renewable energy resources are depleted over time because they will not be naturally replenished for thousands or millions of years.</p> <p>[continued...]</p>	<p>Humans rely on energy resources to fulfill energy needs.</p>	<p>Compare renewable energy resources with non-renewable energy resources.</p> <p>Discuss advantages and disadvantages of using renewable and non-renewable energy resources.</p> <p>Examine how various provinces and territories throughout Canada fulfill energy needs.</p>	<p>  Fire Teachings</p> <p> Legend of Solstice</p>	








Knowledge	Understanding	Skills & Procedures	ᑭᓴᓴᑦ Nehiyaw Ways of Knowing	Other Suggestions
<p>[continued...]</p> <p>Non-renewable energy resources include nuclear and fossil fuels.</p> <p>Alberta relies on both renewable and non-renewable energy resources to fulfill energy needs, including</p> <ul style="list-style-type: none"> • fossil fuels • water and hydro • wind • biomass 				<p>Explore examples such as Métis Crossing and solar farms.</p>
<p>ORGANIZING IDEA</p> <p>Earth System (ES): Understandings of the living world, Earth, and space are deepened by investigating natural systems and their interactions.</p>				
<p>GUIDING QUESTION</p> <p>How can climate and its effects be understood?</p>				
<p>LEARNING OUTCOME</p> <p>5 ES 1.1 Students analyze climate and connect it to weather conditions and agricultural practices.</p>				
<p>Weather is the short-term conditions experienced in a region, including</p> <ul style="list-style-type: none"> • temperature • wind speed and direction • amount of sunlight • precipitation • humidity • cloud cover <p>Climate is the long-term weather patterns of a region over a period of at least 30 years.</p> <p>Data in maps, tables, or graphs can be used to represent key characteristics of climate, including</p> <ul style="list-style-type: none"> • temperature • precipitation • humidity • wind <p>[...continued]</p>	<p>The study of climates across regions helps identify historical patterns and make predictions.</p>	<p>Distinguish climate from weather.</p> <p>Discuss the characteristics of local, national, and global weather conditions to determine climate.</p> <p>Compare key characteristics of climate zones.</p> <p>Interpret data about climate.</p> <p>Relate factors that contribute to Alberta's climate.</p> <p>Compare Alberta's climate to the climates of other Canadian provinces or territories.</p>	<p> Orienteering Series: Weather Indicators</p> <p> Climate Change and Effects on Hunting and Gathering</p>	<p>Use examples that include:</p> <ul style="list-style-type: none"> • Adaptations of animals (i.e., rabbits changing colour due to climate) • Hornets building nests on ground for a dry season, nests built in trees or higher if season will be wet










 Knowledge	Understanding	Skills & Procedures	ᑭᑦᑎᑦᑎᑦᑎᑦ Nehiyaw Ways of Knowing	Other Suggestions
<p>[...continued]</p> <p>Climates are dependent on factors that include</p> <ul style="list-style-type: none"> • geographical location • landforms • altitude • proximity to bodies of water <p>Climate zones are defined areas with distinct climates and include</p> <ul style="list-style-type: none"> • tropical • dry • temperate • polar • continental <p>First Nations, Métis, and Inuit can provide long-term observations of climate for local context.</p>				
LEARNING OUTCOME 5 ES 1.2 Students analyze climate and connect it to weather conditions and agricultural practices.				
<p>Tools to measure and track weather conditions include</p> <ul style="list-style-type: none"> • thermometers • wind vanes • windsocks • anemometers • barometers • rain or snow gauges • hygrometers <p>Websites, weather maps, and weather apps provide access to weather information.</p> <p>[...continued]</p>	<p>Weather conditions can be measured accurately using a variety of tools and methods.</p>	<p>Examine tools used to measure and track weather conditions.</p> <p>Construct simple tools to measure weather.</p> <p>Observe and record local weather for a given time interval.</p> <p>Represent local weather data.</p> <p>Construct a sample weather map of a local region for a given time.</p> <p>Explain the importance of weather forecasts.</p> <p>[...continued]</p>	<p>  7 Year Cycle</p>	<p>Observe trees for weather changes (i.e., poplar trees turning over leaves when it is going to rain).</p>















Knowledge	Understanding	Skills & Procedures	ᑭᓴᓴᑦ Nehiyaw Ways of Knowing	Other Suggestions
<p>[...continued]</p> <p>First Nations, Métis, and Inuit communities rely on traditional knowledge, in addition to modern tools and methods, to interpret and predict weather patterns.</p> <p>Methods used to predict weather include</p> <ul style="list-style-type: none"> • computer modelling • historical data • satellite imaging • First Nations, Métis, and Inuit traditional knowledge 		<p>[...continued]</p> <p>Investigate methods used to predict the weather.</p> <p>Discuss First Nations, Métis, and Inuit methods of predicting weather.</p>		<p> “Spirit Gifting: The Concept of Spiritual Exchange” by Elmer Ghostkeeper, 2007.</p>
<p>LEARNING OUTCOME</p> <p>5 ES 1.3 Students analyze climate and connect it to weather conditions and agricultural practices.</p>				
<p>Climate affects various aspects of human activity, including</p> <ul style="list-style-type: none"> • agriculture • infrastructure • clothing • transportation • recreation <p>Climate affects various aspects of animal activity, including</p> <ul style="list-style-type: none"> • migration patterns • accessing food • timing of reproduction 	<p>Climate affects human and other animal activity.</p>	<p>Explain how climate can affect human and other animal activity.</p>	<p> 7 Year Cycle</p> <p> Legend of Raven and Water</p>	<p>Make observations about:</p> <ul style="list-style-type: none"> • Horses running when bad weather is approaching • Seagulls flying inland when a storm is approaching • Little birds hiding in trees and being still

 Knowledge	Understanding	Skills & Procedures	ᑭᑭᑭᑭᑭ Nehiyaw Ways of Knowing	Other Suggestions
LEARNING OUTCOME 5 ES 1.4 Students analyze climate and connect it to weather conditions and agricultural practices.				
<p>Climate and weather events may influence agricultural practices by affecting components such as</p> <ul style="list-style-type: none"> • crop type • crop production • animal population • soil quality • water access <p>Conservation agriculture is a sustainable practice that responds to local climate and weather events.</p> <p>Conservation agriculture practices are adapted to the requirements of plants and animals farmed.</p> <p>Agricultural practices involve monitoring and responding to climate or weather events such as</p> <ul style="list-style-type: none"> • drought • flooding • fires • windstorms <p>Conservation agriculture practices include</p> <ul style="list-style-type: none"> • minimizing soil disturbance • maintaining soil cover • using water efficiently • using sustainable harvesting practices <p>Sustainable harvesting practices support the maintenance of stable plant or animal populations over time and include</p> <ul style="list-style-type: none"> • crop rotation • companion planting • limiting hunting and trapping • considering future harvests 	<p>Climate and weather events influence agricultural practices.</p>	<p>Describe how climate may affect plants and animals farmed in Alberta.</p> <p>Discuss conservation agriculture practices and potential uses.</p> <p>Describe local climate and weather events that affect agricultural practices.</p> <p>Explain practices related to sustainable harvesting.</p>	<p>   7 Year Cycle</p> <p> Legend of Corn</p>	



Knowledge	Understanding	Skills & Procedures	ᑭᑦᑲᑦᑲᑦ Nehiyaw Ways of Knowing	Other Suggestions
LEARNING OUTCOME 5 ES 1.5 Students analyze climate and connect it to weather conditions and agricultural practices.				
<p>Observations of weather conditions and animal behaviour can be used to recognize patterns and cycles, such as seasonal migration.</p>	<p>Intergenerational observations and accounts of place enable individuals and communities to recognize patterns and cycles related to weather and seasons.</p>	<p>Examine how weather conditions and animal behaviour can be used to recognize weather patterns and cycles.</p>	<p>  7 Year Cycle</p>	
ORGANIZING IDEA Living Systems (LS): Understandings of the living world, Earth, and space are deepened by investigating natural systems and their interactions.				
GUIDING QUESTION How are organisms supported by vital biological processes and systems?				
LEARNING OUTCOME 5 LS 1.1 Students investigate the internal systems of organisms and explain how they support biological processes.				
<p>Vital biological processes in complex organisms are carried out by biological systems that rely on each other.</p> <p>Vital biological processes of complex organisms include</p> <ul style="list-style-type: none"> • movement • nutrition • respiration • growth • reproduction <p>Humans and many other animals have internal biological systems that include the</p> <ul style="list-style-type: none"> • digestive system • respiratory system • circulatory system • musculoskeletal system <p>[...continued]</p>	<p>Humans are complex organisms with biological systems that carry out vital biological processes.</p>	<p>Relate vital biological processes to a human or other animal's internal biological systems.</p> <p>Examine the function of the human digestive, respiratory, circulatory, and musculoskeletal systems.</p> <p>Identify the digestive, respiratory, circulatory, and musculoskeletal systems of the human body and the major body parts of each system.</p> <p>Investigate the relationships between body systems that are involved in moving oxygen and nutrients throughout the human body.</p>	<p> Animate and Inanimate (Throughout Environment)</p> <p>   Elk Harvest Series (5 videos)</p> <p>   Moose Harvest Series (Field Harvest – 6 videos; Butchering and Cutting – 9 videos; Fire Preparation – 3 videos; Feast – 3 videos)</p>	<p>Explore rocks, mountains and land as animate.</p>

 Knowledge	Understanding	Skills & Procedures	ᑭᑦᑎᑦᑎᑦ Nehiyaw Ways of Knowing	Other Suggestions
<p>[...continued]</p> <p>The digestive system breaks down food and absorbs nutrients, and includes the mouth, stomach, intestines, liver, and pancreas.</p> <p>The respiratory system exchanges oxygen and carbon dioxide, and includes the trachea, lungs, and diaphragm.</p> <p>The circulatory system moves blood around the body and includes the heart and blood vessels.</p> <p>The musculoskeletal system supports and moves the body, and includes muscles and bones.</p> <p>The digestive, respiratory, and circulatory systems work together to supply oxygen and nutrients to the human body.</p>				
LEARNING OUTCOME				
5 LS 1.2 Students investigate the internal systems of organisms and explain how they support biological processes.				
<p>Plant transport systems include xylem and phloem.</p> <p>Xylem and phloem in plants perform similar functions to the circulatory system in animals.</p> <p>Xylem transports water and nutrients from the roots to the rest of the plant.</p> <p>Phloem transports sugars from the leaves to the rest of the plant.</p>	<p>Plants are complex organisms with transport systems that carry out specific functions for survival.</p>	<p>Examine the transport systems of plants and describe their functions.</p>	<p> Plants and Trees – Animate/Inanimate (animate)</p> <p>   Birch Tree Tapping Series: Tapping Birch Water (proper way to harvest without killing the tree)</p> <p>   Common Tree Names: Northern Boreal Series (9 videos)</p>	

 Knowledge	Understanding	Skills & Procedures	ᑭᑭᑭᑭ Nehiyaw Ways of Knowing	Other Suggestions
<p>[...continued]</p> <p>Astronomical phenomena can be represented in various ways that connect to daily life, including</p> <ul style="list-style-type: none"> • calendars • cycles • stories and legends • artifacts • models and digital simulations <p>Observations and interpretations of astronomical phenomena can be applied in various contexts, including</p> <ul style="list-style-type: none"> • planting and harvesting crops • hunting 		<p>[...continued]</p> <p>Represent astronomical phenomena in a variety of ways.</p> <p>Explore Indigenous representations of astronomical phenomena, past and present.</p> <p>Identify how observation of astronomical phenomena can determine agricultural and hunting practices.</p>		<p>  Coyote Science website and TV show</p> <p> Lessons from the Earth and Beyond: Bringing Indigenous Knowledge Systems into the Classroom</p>

ORGANIZING IDEA

Computer Science (CS): Problem solving and scientific inquiry are developed through the knowledgeable application of creativity, design, and computational thinking.

GUIDING QUESTION




In what ways can design be used to help achieve desired outcomes or purposes?


LEARNING OUTCOME

5 CS 1.1 Students apply design processes when creating artifacts that can be used by a human or machine to address a need.

<p>A computational artifact is anything created by a human using a computer, such as</p> <ul style="list-style-type: none"> • computer programs and code • images • audio • video • presentations • web pages <p>Design can be used to create algorithms and translate them into code.</p> <p>Code is any language that can be understood by and run on a computer.</p> <p>[...continued]</p>	<p>Design can be used by humans or machines to meet needs.</p>	<p>Engage in the design process to create computational artifacts.</p> <p>Relate a block of code to an outcome or a behaviour.</p> <p>Explain what will happen when single or multiple blocks of code are executed.</p> <p>[...continued]</p>		
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	--



Knowledge	Understanding	Skills & Procedures	ᑕᑦᑎᑦᑎᑦᑎᑦ Nehiyaw Ways of Knowing	Other Suggestions
<p>[...continued]</p> <p>There are many ways to code, including using visual block-based languages.</p> <p>Visual block-based languages are a form of code in which prepared chunks of instructions are in drag-and-drop blocks that fit together like puzzle pieces to design a program.</p> <p>A computer cannot think for itself and must rely on code for all that it does.</p> <p>A loop is a repetition of instructions used in an algorithm.</p>		<p>[...continued]</p> <p>Translate a given algorithm to code using a visual block-based language.</p> <p>Design an algorithm that includes a loop and translate it into code.</p>		
LEARNING OUTCOME 5 CS 1.2 Students apply design processes when creating artifacts that can be used by a human or machine to address a need.				
<p>Design process can be influenced by various factors, including</p> <ul style="list-style-type: none"> • safety • functionality • usability • reliability • efficiency • aesthetics <p>Functionality is the quality of being useful to do the job for which something was designed.</p> <p>Usability is the degree of ease with which something can be used to achieve an outcome.</p> <p>Design processes that support the development of multiple iterations include</p> <ul style="list-style-type: none"> • enhancing • refining <p>Design can be improved through collaboration.</p>	<p>Design can better meet needs through the development of multiple iterations.</p>	<p>Discuss examples of designs that have been enhanced or refined to better meet needs.</p> <p>Evaluate an artifact based on various factors.</p> <p>Design an artifact to meet a need.</p> <p>Propose enhancements and refinements to an artifact in collaboration with others.</p> <p>Develop multiple iterations of an artifact.</p>	<p> Trickster and the Tipi</p> <p> Legend of Tipi</p> <p> Trickster and the Tipi (Told in Cree)</p>	

Knowledge	Understanding	Skills & Procedures	ᑭᐱᑦᑎᑦ Nehiyaw Ways of Knowing	Other Suggestions
ORGANIZING IDEA Scientific Method (SM): Investigation of the physical world is enhanced through the use of scientific methods that attempt to remove human biases and increase objectivity.				
GUIDING QUESTION How does evidence lead to understanding?				
LEARNING OUTCOME 5 SM 1.1 Students investigate how evidence is gathered and explain the importance of ethics in science.				
<p>Phenomena are facts or events that can be observed.</p> <p>Some phenomena can be directly observed using the human senses.</p> <p>Phenomena that cannot be directly observed using the human senses can be observed and measured using technologies such as telescopes, microscopes, and X-rays.</p> <p>Natural phenomena occur without human input, such as lightning and auroras.</p>	<p>Investigations can be conducted to better understand phenomena.</p>	<p>Discuss technologies that provide scientists with evidence that cannot be directly observed using the human senses.</p>	 <p>Legend of Death (Northern Lights)</p>	
LEARNING OUTCOME 5 SM 1.2 Students investigate how evidence is gathered and explain the importance of ethics in science.				
<p>Bias is any personal thoughts, feelings, or expectations that influence an investigation.</p> <p>Humans are not usually aware of their personal biases.</p>	<p>Evidence is more reliable and valid when investigations are conducted in a way that limits bias.</p>	<p>Identify biases that could influence an investigation.</p>		



Knowledge	Understanding	Skills & Procedures	ᑭᐱᑦᑎᑦ Nehiyaw Ways of Knowing	Other Suggestions
LEARNING OUTCOME				
5 SM 1.3 Students investigate how evidence is gathered and explain the importance of ethics in science.				
<p>A variable is a condition or factor that can influence the outcome of an experiment.</p> <p>A manipulated or independent variable is changed to determine what effect the change will have on the responding variable in a controlled experiment.</p> <p>A responding or dependent variable changes as a result of changes to the manipulated variable in a controlled experiment.</p> <p>A controlled variable is kept the same in a controlled experiment.</p> <p>A controlled experiment is an investigation in which one variable is changed and all other variables are kept the same.</p>	<p>Evidence from a controlled experiment can be used to make conclusions about cause-and-effect relationships between variables.</p>	<p>Plan and conduct a controlled experiment.</p> <p>Identify the variables in a controlled experiment.</p> <p>Apply vocabulary for variables correctly in science contexts.</p> <p>Evaluate the effect of the manipulated variable on the responding variable in a controlled experiment.</p> <p>Defend a conclusion about cause and effect based on evidence produced in a controlled experiment.</p>		
LEARNING OUTCOME				
5 SM 1.4 Students investigate how evidence is gathered and explain the importance of ethics in science.				
<p>Representations of data can include all or some of the data.</p> <p>Diverse representations of data can communicate evidence differently.</p> <p>Evidence that is communicated clearly and accurately</p> <ul style="list-style-type: none"> • uses correct vocabulary • includes all relevant data • is free from personal bias • can be understood by the intended audience <p>Evidence that is not communicated clearly and accurately can influence the validity and reliability of the investigation.</p>	<p>Evidence must be communicated clearly and accurately.</p>	<p>Discuss the use of diverse representations of data in communicating evidence.</p> <p>Compare the clarity and accuracy of evidence communicated by diverse representations of data.</p> <p>Discuss potential impacts of evidence that is not communicated clearly and accurately.</p>		

