GRADE SIX

	All Year	Fall	Winter	Spring
English Language Arts	**Teach and/or reinforce all year** **Integrate themes from Social Studies, Science, Math and Land Based Learning**			
Social Studies		Citizens Participating in Decision Making	Citizens Participating in Decision Making Historical Models of Democracy - Ancient Greece	Historical Models of Democracy - Ancient Greece
Mathematics		**Number Sense** **Statistics and Probability**	**Number Sense** **Statistics and Probability** Patterns and Relations	**Number Sense** **Statistics and Probability** Shape and Space
Science		**Evidence and Investigation** **Trees and Forests** Air and Aerodynamics	**Evidence and Investigation** **Trees and Forests** Sky Science	**Evidence and Investigation** **Trees and Forests** Flight

HOW TO READ THE CURRICULUM CHARTS

- Specific learning outcomes deemed as Essential Learning Outcomes (ELOs) are identified in bold
- The colours and icons on this "year-at-a-glance" are used in the curriculum charts that follow to indicate when outcomes or groups of outcomes can be taught - all year or anytime throughout the year; fall; winter; and/or spring
- ELOS with no specific season are identified with the "All Year" colour as they could be taught and reinforced at any time throughout the year

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Big Idea, Major Concepts, GLOs	Specific Learning Outcomes ELOs are bold	Season	Nehiyaw Ways of Knowing
GENERAL OUTCOME 1 **Students will listen, speak, read, write, view and represent to explore thoughts, ideas, feelings and experiences.**			
1.1 Discover and Explore			
Express ideas and develop understanding	Use prior experiences with oral, print and other media texts to choose new texts that meet learning needs and interests		
	Read, write, represent and talk to explore and explain connections between prior knowledge and new information in oral, print and other media texts		• **Nature walks, fall activities, fishing, canoeing, arrow making**
	Engage in exploratory communication to share personal responses and develop own interpretations		
Experiment with language and forms	Experiment with a variety of forms of oral, print and other media texts to discover those best suited for exploring, organizing and sharing ideas, information and experiences		
Express preferences	**Assess a variety of oral, print and other media texts, and discuss preferences for particular forms**		• **Videos, Elders sharing stories, Interpreters, Indigenous Art, wildlife picture prompts**
Set goals	**Assess personal language use, and revise personal goals to enhance language learning and use**		• **Demolition derby, horseback riding, rabbit snaring & making**
1.2 Clarify and Extend			
Consider others' ideas	Select from the ideas and observations of others to expand personal understanding		
Combine ideas	Use talk, notes, personal writing and representing, together with texts and the ideas of others, to clarify and shape understanding		
Extend understanding	**Evaluate the usefulness of new ideas, techniques and texts in terms of present understanding**		• **Walking and picking medicinal plants, explaining their use, Moose habitat/calling, tea/fire/ shelter making**

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Big Idea, Major Concepts, GLOs	Specific Learning Outcomes ELOs are bold	Season	Nehiyaw Ways of Knowing
GENERAL OUTCOME 2 **Students will listen, speak, read, write, view and represent to comprehend and respond personally and critically to oral, print and other media texts.**			
2.1 Use Strategies and Cues			
Use prior knowledge	Combine personal experiences and the knowledge and skills gained through previous experiences with oral, print and other media texts to understand new ideas and information		
	Apply knowledge of organizational structures of oral, print and other media texts to assist with constructing and confirming meaning		
Use comprehension strategies	**Identify, and explain in own words, the interrelationship of the main ideas and supporting details**		• **Comprehension stories/ reading assessment activities/ traditional stories/ reading online/reading comic strips/ fishing & hunting stories from YouTube (all season traditional activities)**
	Preview the content and structure of subject area texts, and use this information to set a purpose, rate and strategy for reading		
	Use definitions provided in context to identify the meanings of unfamiliar words		
	Monitor understanding by evaluating new ideas and information in relation to known ideas and information		
Use textual cues	Use text features, such as charts, graphs and dictionaries, to enhance understanding of ideas and information		
	Identify and use the structural elements of texts, such as magazines, newspapers, newscasts and news features, to access and comprehend ideas and information		
Use phonics and structural analysis	**Use the meanings of prefixes and suffixes to predict the meanings of unfamiliar words in context**		• **Using Nehiyawin words to English words**
	Integrate and apply knowledge of phonics, sight vocabulary, language and context clues, and structural analysis to read unfamiliar words in texts of increasing length and complexity		• **Reading comprehension using traditional stories/ Wisakicak/ canoeing/trapping**
Use references	Choose the most appropriate reference to confirm the spellings or locate the meanings of unfamiliar words in oral, print and other media texts		

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Big Idea, Major Concepts, GLOs	Specific Learning Outcomes ELOs are bold	Season	Nehiyaw Ways of Knowing
	2.2 Respond to Texts		
Experience various texts	Experience oral, print and other media texts from a variety of cultural traditions and genres, such as autobiographies, travelogues, comics, short films, myths, legends and dramatic performances		
	Explain own point of view about oral, print and other media texts		
	Make connections between own life and characters and ideas in oral, print and other media texts		• **Make connections between traditional Nehiyawin stories to stories from textbooks/online sources**
	Discuss common topics or themes in a variety of oral, print and other media texts		
	Discuss the author's, illustrator's, storyteller's or filmmaker's intention or purpose		
Construct meaning from texts	**Observe and discuss aspects of human nature revealed in oral, print and other media texts, and relate them to those encountered in the community**		• **Make connections between traditional Nehiyawin stories (do not include spirituality look more to moral and ethics) to stories about today**
	Summarize oral, print or other media texts, indicating the connections among events, characters and settings		
	Identify or infer reasons for a character's actions or feelings		
	Make judgements and inferences related to events, characters, setting and main ideas of oral, print and other media texts		
	Comment on the credibility of characters and events in oral, print and other media texts, using evidence from personal experiences and the text		• **Make connections between traditional Nehiyawin stories to stories about today**
Appreciate the artistry of texts	Explain how metaphor, personification and synecdoche are used to create mood and mental images		

Big Idea, Major Concepts, GLOs	Specific Learning Outcomes ELOs are bold	Season	Nehiyaw Ways of Knowing
Appreciate the artistry of texts	**Experiment with sentence patterns, imagery and exaggeration to create mood and mental images**		• **Connect experiences from Culture Camp to interest students who did not attend the camp in classroom exercises. Oral Storytelling/Story writing following the traditional patterns**
	Discuss how detail is used to enhance character, setting, action and mood in oral, print and other media texts		
	2.3 Understand Forms, Elements and Techniques		
Understand forms and genres	Identify key characteristics of a variety of forms or genres of oral, print and other media texts		
	Discuss the differences between print and other media versions of the same text		
Understand techniques and elements	**Discuss the connections among plot, setting and characters in oral, print and other media texts**		• **Connect experiences from Culture Camp and stories relating to the four seasons in classroom exercises. Oral Storytelling/Story writing following the traditional patterns**
	Identify first and third person narration, and discuss preferences with reference to familiar texts		
	Explore techniques, such as visual imagery, sound, flashback and voice inflection, in oral, print and other media texts		• **Connect to stories relating to the four seasons and the oral stories told at Culture Camp**
	Identify strategies that presenters use in media texts to influence audiences		
Experiment with language	Alter words, forms and sentence patterns to create new versions of texts for a variety of purposes; explain how imagery and figurative language, such as personification and alliteration, clarify and enhance meaning		

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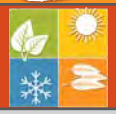
Big Idea, Major Concepts, GLOs	Specific Learning Outcomes ELOs are bold	Season	Nehiyaw Ways of Knowing
	2.4 Create Original Text		
Generate ideas	**Choose life themes encountered in reading, listening and viewing activities, and in own experiences, for creating oral, print and other media texts**		• **Connect experiences from Culture Camp to interest students who did not attend the camp in classroom exercises. Oral Storytelling/Story writing following the traditional patterns**
Elaborate on the expression of ideas	Use literary devices, such as imagery and figurative language, to create particular effects		
Structure texts	Determine purpose and audience needs to choose forms, and organize ideas and details in oral, print and other media texts		
	Express the same ideas in different forms and genres; compare and explain the effectiveness of each for audience and purpose		
	GENERAL OUTCOME 3 **Students will listen, speak, read, write, view and represent to manage ideas and information.**		
	3.1 Plan and Focus		
Focus attention	Distinguish among facts, supported inferences and opinions		
	Use note-taking or representing to assist with understanding ideas and information, and focusing topics for investigation		• **Journal writing/note taking during camp activities**
Determine information needs	**Decide on and select the information needed to support a point of view**		• **5 W(s) and H lesson activities**
Plan to gather information	Develop and follow own plan for accessing and gathering ideas and information, considering guidelines for time and length of investigation and presentation		
	3.2 Select and Process		
Use a variety of sources	**Locate information to answer research questions, using a variety of sources, such as printed texts, bulletin boards, biographies, art, music, community resource people, CDROMs and the Internet**		• **Knowledge Keepers input should be sought first in the research process for authentic information on traditional activities. (Use activity to correct misconceptions from other sources) (Animal uses - Buffalos etc.)**

Big Idea, Major Concepts, GLOs	Specific Learning Outcomes ELOs are bold	Season	Nehiyaw Ways of Knowing
Access information	Use a variety of tools, such as bibliographies, thesauri, electronic searches and technology, to access information		
	Skim, scan and read closely to gather information		
Evaluate sources	Evaluate the congruency between gathered information and research purpose and focus, using pre-established criteria		
	3.3 Organize, Record and Evaluate		
Organize information	Organize ideas and information using a variety of strategies and techniques, such as comparing and contrasting, and classifying and sorting according to subtopics and sequence		
	Organize and develop ideas and information into oral, print or other media texts with introductions that interest audiences and state the topic, sections that develop the topic and conclusions		• **Creating story outlines/mapping, graphic organizers, from traditional information or from a Nehiyawin understandings**
Record information	Make notes on a topic, combining information from more than one source; use reference sources appropriately		
	Use outlines, thought webs and summaries to show the relationships among ideas and information and to clarify meaning		
	Quote information from oral, print and other media sources		
Evaluate information	Evaluate the appropriateness of information for a particular audience and purpose		
	Recognize gaps in gathered information, and suggest additional information needed for a particular audience and purpose		• **Recognize gaps in gathered information, and suggest additional information needed for a particular audience and purpose**
	3.4 Share and Review		
Share ideas and information	Communicate ideas and information in a variety of oral, print and other media texts, such as multiparagraph reports, question and answer formats and graphs		
	Select appropriate visuals, print and/or other media to inform and engage the audience		

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Big Idea, Major Concepts, GLOs	Specific Learning Outcomes ELOs are bold	Season	Nehiyaw Ways of Knowing
Review research process	**Establish goals for enhancing research skills**		• **Project assignment to learn more about the traditional activities at cultural camp**
GENERAL OUTCOME 4 **Students will listen, speak, read, write, view and represent to enhance the clarity and artistry of communication.**			
	4.1 Enhance and Improve		
Appraise own and others' work	Work collaboratively to revise and enhance oral, print and other media texts		
	Ask for and evaluate the usefulness of feedback and assistance from peers		
Revise and edit	**Revise to provide focus, expand relevant ideas and eliminate unnecessary information**		• **Revision of writing assignments (narratives, descriptive) on various traditional customs from culture camp activities**
	Edit for appropriate verb tense and for correct pronoun references		
	Use paragraph structures in expository and narrative texts		
Enhance legibility	**Write legibly and at a pace appropriate to context and purpose**		• **Essay/presentation/letter writing, point form writing**
	Experiment with a variety of software design elements, such as spacing, graphics, titles and headings, and font sizes and styles, to enhance the presentation of texts		• **Computer work activities/ Chromebook activities**
Expand knowledge of language	Show the relationships among key words associated with topics of study, using a variety of strategies such as thought webs, outlines and lists		
	Choose words that capture a particular aspect of meaning and that are appropriate for context, audience and purpose		
Enhance artistry	**Experiment with several options, such as sentence structures, figurative language and multimedia effects, to choose the most appropriate way of communicating ideas or information**		• **Mechanics of Microsoft suite to create and publish assignments**

Big Idea, Major Concepts, GLOs	Specific Learning Outcomes ELOs are bold	Season	Nehiyaw Ways of Knowing
	4.2 Attend to Conventions		
Attend to grammar and usage	Identify the use of coordinate and subordinate conjunctions to express ideas		
	Use complex sentence structures and a variety of sentence types in own writing		
	Identify comparative and superlative forms of adjectives, and use in own writing		
	Identify past, present and future verb tenses, and use throughout a piece of writing		• **Written Nehiyawin language (tipi/ greetings/basic social commands**
Attend to spelling	Use a variety of resources and strategies to determine and learn the correct spelling of common exceptions to conventional spelling patterns		
	Explain the importance of correct spellings for effective communication		
	Edit for and correct commonly misspelled words in own writing, using spelling generalizations and the meaning and function of words in context		
Attend to capitalization and punctuation	Use colons before lists, to separate hours and minutes, and after formal salutations in own writing		
	Identify parentheses and colons when reading, and use them to assist comprehension		
	4.3 Present and Share		
Present information	Use various styles and forms of presentations, depending on content, audience and purpose		
Enhance presentation	Emphasize key ideas and information to enhance audience understanding and enjoyment		
Use effective oral and visual communication	Demonstrate control of voice, pacing, gestures and facial expressions; arrange props and presentation space to enhance communication		
Demonstrate attentive listening and viewing	**Identify the tone, mood and emotion conveyed in oral and visual presentations**		• **Knowledge Keepers storytelling/ presentations made by other guest speakers on course content**
	Respond to the emotional aspects of presentations by providing nonverbal encouragement and appreciative comments		

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Big Idea, Major Concepts, GLOs	Specific Learning Outcomes ELOs are bold	Season	Nehiyaw Ways of Knowing
GENERAL OUTCOME 5 **Students will listen, speak, read, write, view and represent to respect, support and collaborate with others.**			
5.1 Respect Others and Strengthen Community			
Appreciate diversity	Compare personal challenges and situations encountered in daily life with those experienced by people or characters in other times, places and cultures portrayed in oral, print and other media texts		
	Share and discuss ideas and experiences that contribute to different responses to oral, print and other media texts		
Relate texts to culture	Identify ways in which oral, print and other media texts from diverse cultures and communities explore similar ideas		
Celebrate accomplishments and events	**Use appropriate language to participate in public events, occasions or traditions**		• **Observation of proper protocols for (Christmas events/treaty days events/Elders' events) Practice respectful conduct and speech and upholding traditional values in these settings)**
Use language to show respect	Demonstrate respect by choosing appropriate language		
5.2 Work Within a Group			
Cooperate with others	**Assume a variety of roles, and share responsibilities as a group member**		• **Role play/dramatization activities (displaying skills in tipi making, and showing environmental stewardship, traditional games**
	Identify and participate in situations and projects in which group work enhances learning and results		
Work in groups	Contribute to group knowledge of topics to identify and focus information needs, sources and purposes for research or investigations		
	Address specific problems in a group by specifying goals, devising alternative solutions and choosing the best alternative		• **Assign group project activities on a current topical issue/classroom debates and presentations (e.g., environmental issues, waste management, health issues)**
Evaluate group process	Assess own contributions to group process, and set personal goals for working effectively with others		

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Big Idea, Major Concepts, GLOs	Specific Learning Outcomes ELOs are bold	Season	Nehiyaw Ways of Knowing
6.1 Citizens Participating in Decision Making			
GENERAL OUTCOME: **Students will demonstrate an understanding and appreciation of the dynamic relationship between governments and citizens as they engage in the democratic process.**			
Values and Attitudes			
6.1.1 Recognize how individuals and governments interact and bring about change within their local and national communities:	• recognize and respect the democratic rights of all citizens in Canada (C, I)		
	• **value the role of the Canadian Charter of Rights and Freedoms in protecting individual and collective rights and freedoms (I, PADM)**		• **Study and understand how section 35 of the Charter protects their freedoms and rights as well as Métis and Inuit have inherent rights**
	• recognize the influence of historical events and legislation on democratic decision making in Canada (TCC, PADM)		
	• **value citizens' participation in a democratic society (C)**		• **Look at local governments/ provincial and federal; connections to leadership and how to contribute to your community in meaningful ways**
	• value the contributions of elected representatives in the democratic process (PADM)		
Knowledge and Understanding			
6.1.2 Demonstrate an understanding of the fundamental principles of democracy by exploring and reflecting upon the following questions and issues:	• What is democracy (i.e., justice, equity, freedoms, representation)? (C, PADM)		
	• What are the similarities and differences between direct and representative democracy? (PADM)		
	• **What are the rights and responsibilities of citizens living in a representative democracy? (C, PADM)**		• **Respecting the rights of others - with rights comes responsibilities; right to express your opinions; looking at the rights of off reserve members vs on reserve members**
	• How does Canada's justice system help protect your democratic and constitutional rights? (C, PADM)		

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Big Idea, Major Concepts, GLOs	Specific Learning Outcomes ELOs are bold	Season	Nehiyaw Ways of Knowing
6.1.3 Analyze how the democratic ideals of equity and fairness have influenced legislation in Canada over time by exploring and reflecting upon the following questions and issues:	• How does the Canadian Charter of Rights and Freedoms protect the individual rights and freedoms of all Canadians? (I, PADM)		
	• **How does the Canadian Charter of Rights and Freedoms protect collective rights in Canada (i.e., Aboriginal rights, the linguistic rights of official language minorities)? (I, PADM)**		• **Study and understand how section 35 of the Charter protects their freedoms and rights as well as Métis and Inuit have inherent rights**
	• How did the Treaty of La Grande Paix de Montréal address collective identity and collective rights? (I, PADM, TCC)		
	• How do the Treaty of La Grande Paix de Montréal and the Canadian Charter of Rights and Freedoms compare in the way that each addresses individual and collective identity and collective rights? (PADM, TCC, I)		
	• Why is the Canadian Charter of Rights and Freedoms entrenched in the Canadian Constitution? (C, I, PADM)		
6.1.4 Analyze the structure and functions of local governments in Alberta by exploring and reflecting upon the following questions and issues:	• How are representatives chosen to form a local government (i.e., electoral process)? (PADM)		
	• What are the responsibilities of local governments (i.e., bylaws, taxes, services)? (PADM)		
	• **How are local governments structured differently in rural and urban settings? (PADM)**		• **Explore the election process for chiefs and council; Research how MDs are elected**
	• What role is played by school boards (i.e., public, separate, Francophone) within local communities? (PADM)		
6.1.5 Analyze the structure and functions of Alberta's provincial government by exploring and reflecting upon the following questions and issues:	• How is the provincial government structured? (PADM)		
	• What is the role and status of the Lieutenant Governor within the provincial government? (GC, PADM)		
	• What are the responsibilities of the provincial government (i.e., laws, taxes, services)? (PADM)		
	• How are representatives chosen at the provincial level of government (i.e., electoral process)? (PADM)		
	• What are the differences between the responsibilities of a Member of the Legislative Assembly (MLA) and a cabinet minister? (PADM)		

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Big Idea, Major Concepts, GLOs	Specific Learning Outcomes ELOs are bold	Season	Nehiyaw Ways of Knowing
6.1.6 Analyze how individuals, groups and associations within a community impact decision making of local and provincial governments by exploring and reflecting upon the following questions and issues:	• **How can individuals, groups and associations within a community participate in the decision-making process regarding current events or issues (i.e., lobbying, petitioning, organizing and attending local meetings and rallies, contacting elected representatives)? (C, PADM)**		• **Elder communities; youth committees, PAC/school council; KTCEA board/community liaison people**
	• How do associations such as the Association canadienne-française de l'Alberta (ACFA), the Métis Nation of Alberta Association (MNAA) and the First Nations Authorities (FNA) provide their members with a voice, at local and provincial levels, exercising historical and constitutional rights? (C, I, PADM)		
	• **In what ways do elected officials demonstrate their accountability to the electorate (e.g., respond to constituents, participate in local events, represent and express in government meetings the concerns of constituents)? (C, PADM)**		• **Looking at the roles and responsibilities of local government; attendance at meetings**
6.2 Historical Models of Democracy: Ancient Athens and the Iroquois Confederacy			
GENERAL OUTCOME: Students will demonstrate an understanding and appreciation of the democratic principles exemplified by ancient Athens and the Iroquois Confederacy.			
Values and Attitudes			
6.2.1 Appreciate the relationship between the values of a society and the model of government adopted within a society (PADM)	6.2.1 Appreciate the relationship between the values of a society and the model of government adopted within a society (PADM)		
6.2.2 Value the role of participation by citizens in diverse democratic societies (C, PADM)	6.2.2 Value the role of participation by citizens in diverse democratic societies (C, PADM)		

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Big Idea, Major Concepts, GLOs	Specific Learning Outcomes ELOs are bold	Season	Nehiyaw Ways of Knowing
	Knowledge and Understanding		
6.2.3 Analyze the structure and functions of the democratic system in ancient Athens by exploring and reflecting upon the following questions and issues	• How was the government of ancient Athens structured? (PADM)		
	• How did the structure of the government in ancient Athens provide opportunities for citizens to participate in decision making? (C, PADM)		
	• How did identity, status and class structure impact citizenship in ancient Athens? (C, I)		
	• How did the social structure of ancient Athens impact its political structure? (CC, PADM)		
	• **To what extent were democratic ideals of equity and fairness part of the structure of government and society in ancient Athens? (I, PADM)**		• **Research project**
6.2.4 Analyze the structure and functions of the Iroquois Confederacy by exploring and reflecting upon the following questions and issues:	• How was the Iroquois Confederacy structured? (PADM)		
	• What was the role and status of women within the Iroquois Confederacy? (I, PADM)		
	• What are the advantages and disadvantages of consensus as a decision-making model for government? (PADM)		
	• **How did the Six Nations use the consensus-building process? (PADM)**		• **Research project**
	• How did the Wampum Belt address collective identity? (I, PADM)		
	• **How did the social structure of the Iroquois Confederacy impact its political structure? (CC, PADM)**		• **Research - connect to the Six Nations research**
	• To what extent did the decision-making process within the Iroquois Confederacy reflect democratic ideals of equity and fairness? (PADM)		

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Big Idea, Major Concepts, GLOs	Specific Learning Outcomes ELOs are bold	Season	Nehiyaw Ways of Knowing
	SKILLS AND PROCESSES FOR SOCIAL STUDIES		
	Dimensions of Thinking		
6.S.1 Develop skills of critical thinking and creative thinking:	• **assess significant local and current affairs from a variety of sources, with a focus on examining bias and distinguishing fact from opinion**		***Note: Identified as an ELO with GLO 6.1***
			• **Look at oral history as opposed to written history** ***Note: Identified as an ELO with GLO 6.2***
	• **critically evaluate ideas, information and positions**		***Note: Identified as an ELO with GLO 6.1***
	• re-evaluate personal opinions to broaden understanding of a topic or an issue		
	• generate original ideas and strategies in individual and group activities • seek responses to inquiries from various authorities through electronic media		
6.S.2 Develop skills of historical thinking:	• use primary sources to interpret historical events and issues		
	• **use historical and community resources to understand and organize the sequence of historical events**		***Note: Identified as an ELO with GLO 6.1***
			• **Use oral history from Elders/ knowledge keepers** ***Note: Identified as an ELO with GLO 6.2***
	• explain the historical contexts of key events of a given time period		
	• use examples of events to describe cause and effect and change over time • organize information, using such tools as a database, spreadsheet or electronic webbing		
6.S.3 Develop skills of geographic thinking:	• **construct and interpret various types of maps (i.e., historical, physical, political maps) to broaden understanding of topics being studied**		***Note: Identified as an ELO with GLO 6.1***
	• use geographic tools, including software, that assist in preparing graphs and maps		

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Big Idea, Major Concepts, GLOs	Specific Learning Outcomes ELOs are bold	Season	Nehiyaw Ways of Knowing
6.S.3 Develop skills of geographic thinking:	• use cardinal and intermediate directions to locate places on maps and globes		
	• **use scales to determine the distance between places on maps and globes**		***Note: Identified as an ELO with GLO 6.1***
	• identify geographic problems and issues and pose geographic questions		
6.S.4. Demonstrate skills of decision making and problem solving:	• **propose and apply new ideas, strategies and options, supported with facts and reasons, to contribute to decision making and problem solving**		***Note: Identified as an ELO with GLO 6.1***
	• consider multiple perspectives when dealing with issues, decision making and problem solving		
	• collaborate with others to devise strategies for dealing with problems and issues • 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 among ideas and information in a problem-solving environment • solve issue-related problems, using such communication tools as a word processor or e-mail to involve others in the process • generate alternative solutions to problems by using technology to facilitate the process		
Social Participation as a Democratic Practice			
6.S.5 Demonstrate skills of cooperation, conflict resolution and consensus building:	• **demonstrate the skills of compromise to reach group consensus**		***Note: Identified as an ELO with GLO 6.1/6.2***
	• **work collaboratively with others to achieve a common goal** • **record group brainstorming, planning and sharing of ideas by using technology** • **extend the scope of a project beyond classroom collaboration by using communication technologies, such as the telephone and e-mail**		

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Big Idea, Major Concepts, GLOs	Specific Learning Outcomes ELOs are bold	Season	Nehiyaw Ways of Knowing
6.S.6 Develop age-appropriate behaviour for social involvement as responsible citizens contributing to their community, such as:	• demonstrate commitment to the well-being of their community by drawing attention to situations of injustice where action is needed		
	Research for Deliberative Inquiry		
6.S.7 Apply the research process:	• **determine reliability of information filtering for point of view and bias**		***Note: Identified as an ELO with GLO 6.2***
	• formulate questions to be answered through the research process		
	• use graphs, tables, charts and Venn diagrams to interpret information		
	• draw and support conclusions based on information gathered to answer a research question		
	• include references in an organized manner as part of research		
	• formulate new questions as research progresses • 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) • 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		
6.S.8 Demonstrate skills of oral, written and visual literacy:	• **express opinions and present perspectives and information in a variety of forms such as oral or written presentations, speeches or debates**		***Note: Identified as an ELO with GLO 6.2***
	• express reasons for their ideas and opinions, in oral or written form		
	• use skills of informal debate to persuasively express differing viewpoints regarding an issue		

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Big Idea, Major Concepts, GLOs	Specific Learning Outcomes ELOs are bold	Season	Nehiyaw Ways of Knowing
6.S.8 Demonstrate skills of oral, written and visual literacy:	• respond appropriately to comments and questions, using language respectful of human diversity		
	• **listen to others to understand their perspectives** • **organize information gathered from the Internet, or an electronic source, by selecting and recording the data in logical files or categories** • **communicate effectively through appropriate forms, such as speeches, reports and multimedia presentations, applying information technologies that serve particular audiences and purposes**		***Note: Identified as an ELO with GLO 6.1***
6.S.9 Develop skills of media literacy:	• detect bias present in the media		
	• examine and assess diverse perspectives regarding an issue presented in the media		
	• **analyze significant current affairs** • **identify and distinguish points of view expressed in electronic sources on a particular topic** • **use selected presentation tools to demonstrate connections among various pieces of information** • **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**		***Note: Identified as an ELO with GLO 6.2***

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Big Idea, Major Concepts, GLOs	Specific Learning Outcomes ELOs are bold	Season	Nehiyaw Ways of Knowing
NUMBER AT A GLANCE Problem solving with whole numbers and decimal numbers; factors and multiples (prime and composite numbers); percent; integers; order of operations			
Quantity Operational Sense Relationships Representation Reasoning			
The Base Ten Numeration System-is a scheme for recording numbers 0-9, groups of ten(s), and place value	**1. Demonstrate an understanding of place value, including numbers that are:** • **greater than one million** • **less than one thousandth. [C, CN, R, T]**		• **Forecasting animal populations over the next decade.**
Numbers-the set of real numbers is infinite. Each real number can be associated with a unique point on the number line. (counting numbers, whole numbers, integers, fractions/rational numbers) Estimation-approximated numerical calculations using numbers/ referents that are easier to compute with mentally.	**2. Solve problems involving whole numbers and decimal numbers. [ME, PS, T] [ICT: C6–2.4]**		• **Budgeting (e.g., cost of school lunch program, cost of supplies to build snow shoes, etc.)**
Properties-for a given set of numbers there are relationships that are always true. These rules govern arithmetic and algebra. (properties of operations, properties of equality)	**3. Demonstrate an understanding of factors and multiples by:** • **determining multiples and factors of numbers less than 100** • **identifying prime and composite numbers** • **solving problems using multiples and factors. [CN, PS, R, V]**		
	4. Relate improper fractions to mixed numbers and mixed numbers to improper fractions. [CN, ME, R, V]		
Basic Facts and Algorithms-operations with rational numbers.	**5. Demonstrate an understanding of ratio, concretely, pictorially and symbolically. [C, CN, PS, R, V]**		• **Apply to real life ratios - number of students per class, number of arrows shot per rabbit hit, etc.**
	6. Demonstrate an understanding of percent (limited to whole numbers), concretely, pictorially and symbolically. [C, CN, PS, R, V]		• **Infuse the Cree language - follow the math terms Ask students to figure out how real life LBL camp activities: e.g., How many poles are needed to make 5 tipis? Connections to beading work**

Big Idea, Major Concepts, GLOs	Specific Learning Outcomes ELOs are bold	Season	Nehiyaw Ways of Knowing
Properties-for a given set of numbers there are relationships that are always true. These rules govern arithmetic and algebra. (properties of operations, properties of equality) Basic Facts and Algorithms-operations with rational numbers.	**7. Demonstrate an understanding of integers, concretely, pictorially and symbolically. [C, CN, R, V]**		
	8. Demonstrate an understanding of multiplication and division of decimals (1-digit whole number multipliers and 1-digit natural number divisors). [C, CN, ME, PS, R, V]		• **Look at canning ingredients**
	9. Explain and apply the order of operations, excluding exponents, with and without technology (limited to whole numbers). [C, CN, ME, PS, T] [ICT: C6–2.4, C6–2.7]		
PATTERNS AND RELATIONS AT A GLANCE Using relationships and table of values to solve problems; understanding preservation of equality **Patterns Relationships Variables Expressions Equations**			
Patterns-are relationships that can be described and generalizations made for mathematical situations that have numbers or objects that repeat in predictable ways. (numbers, geometry)	**1. Represent and describe patterns and relationships, using graphs and tables.**		• **Animal populations, finished bead work, diverse human populations**
	2. Demonstrate an understanding of the relationships within tables of values to solve problems.		
Variable-mathematical structures can be translated and represented abstractly using variables, expressions and equations.	**3. Represent generalizations arising from number relationships, using equations with letter variables.**		
	4. Express a given problem as an equation in which a letter variable is used to represent an unknown number.		
Variable-mathematical structures can be translated and represented abstractly using variables, expressions and equations. Equivalence/Equality-any number, measure, algebraic expression, or equation can be represented in an infinite number of ways that have the same value. (preserve the equality)	5. Demonstrate and explain the meaning of preservation of equality, concretely and pictorially.		

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Big Idea, Major Concepts, GLOs	Specific Learning Outcomes ELOs are bold	Season	Nehiyaw Ways of Knowing
	SHAPE AND SPACE – MEASUREMENT **AT A GLANCE** **Estimate and measure angles; developing and applying formulas for perimeter and volume; create and use formulas for perimeter, area and volume**		
	Attributes Relationships Units		
Measurement-some attributes of objects are measurable and can be quantified using unit amounts. (time, length, area, mass, volume, capacity, magnitude, perimeter, angles)	**1. Demonstrate an understanding of angles by:** • **identifying examples of angles in the environment** • **classifying angles according to their measure** • **estimating the measure of angles, using 45°, 90° and 180° as reference angles** • **determining angle measures in degrees** • **drawing and labelling angles when the measure is specified.**		
	2. Demonstrate that the sum of interior angles is: • 180° in a triangle • 360° in a quadrilateral		
	3. Develop and apply a formula for determining the: • perimeter of polygons • area of rectangles • volume of right rectangular prisms		
	SHAPE AND SPACE– 3-D OBJECTS AND 2-D SHAPES AT A GLANCE Describe and compare sides and angles of polygons		
Shape and Space-2D and 3D objects can be constructed, described, classified, analyzed by their attributes.	**4. Construct and compare triangles, including: scalene, isosceles, equilateral, right, obtuse, acute in different orientations.**		
	5. Describe and compare the sides and angles of regular and irregular polygons.		

Big Idea, Major Concepts, GLOs	Specific Learning Outcomes ELOs are bold	Season	Nehiyaw Ways of Knowing
SHAPE AND SPACE – TRANSFORMATIONS AT A GLANCE Identify, describe and perform multiple transformations including individual designs; and on cartisian planes			
Transformations-objects in space can be transformed in an infinite number of ways. Transformations can be described and analyzed mathematically.	6. Perform a combination of translations, rotations and/or reflections on a single 2-D shape, with and without technology, and draw and describe the image.		
	7. Perform a combination of successive transformations of 2-D shapes to create a design, and identify and describe the transformations.		
	8. Identify and plot points in the first quadrant of a Cartesian plane, using whole number ordered pairs.		
	9. Perform and describe single transformations of a 2-D shape in the first quadrant of a Cartesian plane (limited to whole number vertices).		
 **STATISTICS AND PROBABILITY** **AT A GLANCE** **Create, label and interpret line graphs; graph collected data; analyze graph to solve problems**			
Data Collection-the question to be answered determines the data that needs to be collected and how best to collect it. Data Representation-data can be represented and interpreted visually using tables, charts, and graphs.	**1. Create, label and interpret line graphs to draw conclusions.**		
	2. Select, justify and use appropriate methods of collecting data, including: questionnaires, experiments, databases, electronic media.		
	3. Graph collected data, and analyze the graph to solve problems.		
CHANCE AND UNCERTAINTY AT A GLANCE			
Chance-the chance of an event occurring can be describe numerically. (probability)	**4. Demonstrate an understanding of probability by:** • **identifying all possible outcomes of a probability experiment** • **differentiating between experimental and theoretical probability** • **determining the theoretical probability of outcomes in a probability experiment** • **determining the experimental probability of outcomes in a probability experiment** • **comparing experimental results with the theoretical probability for an experiment.**		

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Big Idea, Major Concepts, GLOs	Specific Learning Outcomes ELOs are bold	Season	Nehiyaw Ways of Knowing
	SCIENCE INQUIRY		
	GENERAL LEARNER EXPECTATION 6–1 **Design and carry out an investigation in which variables are identified and controlled, and that provides a fair test of the question being investigated.**		
	GENERAL LEARNER EXPECTATION 6–2 **Recognize the importance of accuracy in observation and measurement; and apply suitable methods to record, compile, interpret and evaluate observations and measurements.**		
Focus	• **ask questions that lead to exploration and investigation**		
	• identify one or more possible answers to questions by stating a prediction or a hypothesis		
Explore and Investigate	• identify, with guidance, ways of finding answers to given questions		
	• plan and carry out procedures that comprise a fair test		
	• identify variables: – identify the variable to be manipulated – identify variables to be held constant – identify the variable that will be observed (responding variable)		
	• select appropriate materials and identify how they will be used		
	• modify the procedures as needed		
	• work individually or cooperatively in planning and carrying out procedures		
	• identify sources of information and ideas and demonstrate skill in accessing them. Sources may include library, classroom, community and computerbased resources		
Reflect and Interpret	• communicate effectively with group members in sharing and evaluating ideas, and assessing progress		
	• record observations and measurements accurately, using a chart format where appropriate. Computer resources may be used for record keeping and for display and interpretation of data		
	• evaluate procedures used and identify possible improvements		

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Big Idea, Major Concepts, GLOs	Specific Learning Outcomes ELOs are bold	Season	Nehiyaw Ways of Knowing
Reflect and Interpret	• state an inference, based on results. The inference will identify a cause and effect relationship that is supported by observations		
	• identify possible applications of what was learned		
	• identify new questions that arise from what was learned.		
PROBLEM SOLVING THROUGH TECHNOLOGY			
GENERAL LEARNER EXPECTATION 6–3 **Design and carry out an investigation of a practical problem, and develop a possible solution.**			
Focus	• identify problems to be solved and the purpose(s) of the problem-solving activity: What problem(s) are we trying to solve? What conditions must be met? What controls are required? How will we know that we have done what we set out to do?		
Explore and Investigate	• identify one or more possible approaches to solving the problem and plan, with guidance, a set of steps to follow		
	• select appropriate materials and identify how they will be used		
	• attempt a variety of strategies and modify procedures, as needed (troubleshoot problems)		
	• work individually or cooperatively in planning and carrying out procedures		
	• identify sources of information and ideas and access information and ideas from those sources. Sources may include library, classroom, community and computer-based resources		
Reflect and Interpret	• communicate with group members to share and evaluate ideas, and assess progress		
	• evaluate the procedures used to solve the problem and identify possible improvements		

Big Idea, Major Concepts, GLOs	Specific Learning Outcomes ELOs are bold	Season	Nehiyaw Ways of Knowing
Reflect and Interpret	• evaluate a design or product, based on a given set of questions or criteria. The criteria/questions may be provided by the teacher or developed by the students. Example criteria include: – effectiveness—Does it work? – reliability—Does it work every time? – durability—Does it stand up to repeated use? – effort—Is it easy to construct? Is it easy to use? – safety—Are there any risks of hurting oneself in making it or using it? – use of materials—Can it be made cheaply with available materials? Does it use recycled materials, and can the materials be used again? – effect on environments – benefit to society		
	• identify positive and negative impacts that may arise and potential risks that need to be monitored: What good effects and what bad effects could this solution have? What would we need to look for to be sure that it is working as intended?		
	• identify new applications for the design or problem solution.		
	ATTITUDES		
	GENERAL LEARNER EXPECTATION 6–4 **Demonstrate positive attitudes for the study of science and for the application of science in responsible ways.**		
	Students will show growth in acquiring and applying the following traits: • curiosity • confidence in personal ability to explore materials and learn by direct study • inventiveness • perseverance: staying with an investigation over a sustained period of time • appreciation of the value of experience and careful observation • a willingness to work with others and to consider their ideas • a sense of responsibility for actions taken • respect for living things and environments, and commitment for their care		

Big Idea, Major Concepts, GLOs	Specific Learning Outcomes ELOs are bold	Season	Nehiyaw Ways of Knowing
	TOPIC A: AIR AND AERODYNAMICS (SEPTEMBER-OCTOBER)		
	GENERAL LEARNER EXPECTATION 6–5 **Describe properties of air and the interactions of air with objects in flight.**		• **Look at the way birds fly, how they use their wings to fly; predators vs non predators**
	1. Provide evidence that air takes up space and exerts pressure, and identify examples of these properties in everyday applications.		
	2. Provide evidence that air is a fluid and is capable of being compressed, and identify examples of these properties in everyday applications.		
	3. Describe and demonstrate instances in which air movement across a surface results in lift— Bernoulli's principle.		
	4. Recognize that in order for devices or living things to fly, they must have sufficient lift to overcome the downward force of gravity.		• **Look at the way birds fly, how they use their wings to fly; predators vs non predators; constructing paper planes and kites and testing them/refining them**
	5. Identify adaptations that enable birds and insects to fly.		• **Examine why certain birds have wings and still can not fly and compare to local birds; compare how a large insect (e.g., dragon fly) flies vs a smaller insect (mosquito)**
	6. Describe the means of propulsion for flying animals and for aircraft.		
	7. Recognize that streamlining reduces drag, and predict the effects of specific design changes on the drag of a model aircraft or aircraft components.		
	8. Recognize that air is composed of different gases, and identify evidence for different gases. Example evidence might include: effects on flames, the "using up" of a particular gas by burning or rusting, animal needs for air exchange.		• **Examine the need for air to light a fire and extinguish a fire; how we use different woods for burning; look at the ways some of the require less oxygen aquatic animals and how some land animals require more; look at algae blooms and winter kill.**

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	9. Interpret and explain: • the reading on a household electrical meter • efficiency labels on electrical appliances.		
	10. Draw and interpret, with guidance, circuit diagrams that include symbols for switches, power sources, resistors, lights and motors.		
TOPIC B: FLIGHT (END OF MARCH - JUNE)			
GENERAL LEARNER EXPECTATION 6-6 **Construct devices that move through air, and identify adaptations for controlling flight.**			• **Archery; construct kites and paper planes and adapt/modify them to see affect on flight; examine questions such as: Does wifi have flight and how would you find out?**
	1. Conduct tests of a model parachute design, and identify design changes to improve the effectiveness of the design.		
	2. Describe the design of a hot-air balloon and the principles by which its rising and falling are controlled.		
	3. Conduct tests of glider designs; and modify a design so that a glider will go further, stay up longer or fly in a desired way; e.g., fly in a loop, turn to the right.		
	4. Recognize the importance of stability and control to aircraft flight; and design, construct and test control surfaces.		• **Construct kites and paper planes and adapt/modify them to see affect on flight; Paul Neethling flight simulator.**
	5. Apply appropriate vocabulary in referring to control surfaces and major components of an aircraft. This vocabulary should include: wing, fuselage, vertical and horizontal stabilizers, elevators, ailerons, rudder.		
	6. Construct and test propellers and other devices for propelling a model aircraft.		
	7. Describe differences in design between aircraft and spacecraft, and identify reasons for the design differences. Note: Model aircraft or rockets may be constructed and used as part of this topic. It is recommended that these models be simple devices of the student's construction, not prefabricated models. Propulsion of rockets by chemical fuels is neither required nor recommended, due to safety considerations.		

Big Idea, Major Concepts, GLOs	Specific Learning Outcomes ELOs are bold	Season	Nehiyaw Ways of Knowing
	TOPIC C: SKY SCIENCE (WINTER/LATE FALL JANUARY-MID MARCH)		
	GENERAL LEARNER EXPECTATION 6-7 **Observe, describe and interpret the movement of objects in the sky; and identify pattern and order in these movements.**	❄	• **Northern lights; constellations and how they move and how we have different constellations throughout the year; First Nations names/stories for constellations; rotation and orbits; Wildred Buck - a blow up planetarium is a resource that might be accessed - he tells constellation stories); KTCEA chart of Cree Constellations and their names and locations (see Jason)**
	1. Recognize that the Sun and stars emit the light by which they are seen and that most other bodies in space, including Earth's Moon, planets and their moons, comets, and asteroids, are seen by reflected light.		
	2. Describe the location and movement of individual stars and groups of stars (constellations) as they move through the night sky.		
	3. Recognize that the apparent movement of objects in the night sky is regular and predictable, and explain how this apparent movement is related to Earth's rotation.		
	4. Understand that the Sun should never be viewed directly, nor by use of simple telescopes or filters, and that safe viewing requires appropriate methods and safety precautions.		
	5. Construct and use a device for plotting the apparent movement of the Sun over the course of a day; e.g., construct and use a sundial or shadow stick.	❄	• **Using the sun to find direction; look at sundials and how other First Nations had sundials built on the land (Blackfoot)**
	6. Describe seasonal changes in the length of the day and night and in the angle of the Sun above the horizon.		• **Look at/graph over time the long days of summer and short days of winter and connect to position of the sun; rotation and orbit.**
	7. Recognize that the Moon's phases are regular and predictable, and describe the cycle of its phases.		

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	8. Illustrate the phases of the Moon in drawings and by using improvised models. An improvised model might involve such things as a table lamp and a sponge ball.		• **Cultural camp looks at the phases of the moon and stories surrounding the moon.**
	9. Recognize that the other eight known planets, which revolve around the Sun, have characteristics and surface conditions that are different from Earth; and identify examples of those differences.		
	10. Recognize that not only Earth, but other planets, have moons; and identify examples of similarities and differences in the characteristics of those moons.		
	11. Identify technologies and procedures by which knowledge, about planets and other objects in the night sky, has been gathered.		
	12. Understand that Earth, the Sun and the Moon are part of a solar system that occupies only a tiny part of the known universe.		
TOPIC D: EVIDENCE AND INVESTIGATION (ALL YEAR)			
GENERAL LEARNER EXPECTATION 6–8 **Apply observation and inference skills to recognize and interpret patterns and to distinguish a specific pattern from a group of similar patterns.**			• **Animal tracks; tracking animal behaviour; phases of the moon; weather patterns; (connect to the other science units)**
GENERAL LEARNER EXPECTATION 6–9 **Apply knowledge of the properties and interactions of materials to the investigation and identification of a material sample.**			• **Moose call materials; moose hide making/tanning; different woods - how we use certain woods for smoking meats vs tanning hides**
	1. Recognize evidence of recent human activity, and recognize evidence of animal activity in a natural outdoor setting.		
	2. Observe a set of footprints, and infer the direction and speed of travel.		• **Cultural camps**
	3. Recognize that evidence found at the scene of an activity may have unique characteristics that allow an investigator to make inferences about the participants and the nature of the activity, and give examples of how specific evidence may be used.		

Big Idea, Major Concepts, GLOs	Specific Learning Outcomes ELOs are bold	Season	Nehiyaw Ways of Knowing
	4. Investigate evidence and link it to a possible source; e.g., by: • **classifying footprints, tire prints and soil samples from a variety of locations** • **analyzing the ink from different pens, using paper chromatography** • **analyzing handwriting samples to identify the handwriting of a specific person** • **comparing samples of fabric** • **classifying fingerprints collected from a variety of surfaces**		• **Cultural camps**
TOPIC E: TREES AND FORESTS (ALL YEAR)			
GENERAL LEARNER EXPECTATION 6-10 **Describe characteristics of trees and the interaction of trees with other living things in the local environment.**			• **Nature walks; cultural camps; looking at where certain medicinal plants grow in relation to trees; categorizing different types of trees**
	1. Identify reasons why trees and forests are valued. Students meeting this expectation should be aware that forests serve as habitat for a variety of living things and are important to human needs for recreation, for raw materials and for a life-supporting environment.		• **Valued for food, oxygen, shelter, animal survival - concepts are reinforced at LBL camps throughout the year**
	2. Describe kinds of plants and animals found living on, under and among trees; and identify how trees affect and are affected by those living things.		• **Concepts are introduced at LBL camps and reinforced/followed up in the classroom**
	3. Describe the role of trees in nutrient cycles and in the production of oxygen.		
	4. Identify general characteristics that distinguish trees from other plants, and characteristics that distinguish deciduous from coniferous trees.		
	5. Identify characteristics of at least four trees found in the local environment. Students should be familiar with at least two deciduous trees and two coniferous trees. Examples should include native species, such as spruce, birch, poplar, and pine and cultivated species, such as elm and crab apple.		• **Concepts are introduced at LBL camps and reinforced/followed up in the classroom**
	6. Describe and classify leaf shapes, leaf arrangements, branching patterns and the overall form of a tree.		

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	7. Interpret the growth pattern of a young tree, distinguishing this year's growth from that of the previous year and from the year before that. Students meeting this expectation should recognize differences in colouration and texture of new growth and old growth, and locate scars that separate old and new growth.		
	8. Identify human uses of forests, and compare modern and historical patterns of use.		• **Firewood; buildings; furniture; tipis; cabins; smoke racks; smoking meats; shade; canoes - specific trees uses. For forest in general: hunting; gathering, etc. Listen to Elder stories or read traditional stories about forest use.**
	9. Identify human actions that enhance or threaten the existence of forests.		
	10. Identify an issue regarding forest use, identify different perspectives on that issue, and identify actions that might be taken.		• **Examples: the use of prescribed burning to keep the forests healthy and prevent huge forest fires**