

## Curricular Connections

### A Step Back in Time

#### Grade 4

#### Social

**K-12 Goal: To examine the local, indigenous, and global interactions and interdependence of individuals, societies, cultures, and nations. (IN)**

**IN4.1 Analyze how First Nations and Métis people have shaped and continue to shape Saskatchewan.**

- a. Create biographic profiles of a selection of Saskatchewan First Nations and Métis leaders in the time period prior to Saskatchewan joining Confederation (e.g., Poundmaker, Big Bear, Riel, Dumont, Almighty Voice)

**IN4.2 Describe the origins of the cultural diversity in Saskatchewan communities.**

- a. Identify the traditional locations of the various First Nations tribes and language groupings in Saskatchewan prior to European contact.
- b. Detail the ways in which First Nations peoples supported the survival of early European newcomers to Saskatchewan.
- e. Represent through speaking, writing, drama, multimedia, or other form, the challenges faced, both historically and in the current era, by First Nations people, Métis people, and immigrants to Saskatchewan
- i. Investigate the role of archaeology in understanding the origins of Saskatchewan communities.

**K-12 Goal: To analyze the dynamic relationships of people with the land, environments, events, and ideas as they have affected the past, shape the present, and influence the future. (DR)**

**DR4.1 Correlate the impact of the land on the lifestyles and settlement patterns of the people of Saskatchewan.**

- a. Locate Saskatchewan on a map of Canada, North America, and the world.
- b. Locate the geographic centre of Saskatchewan on a map.
- c. Make inferences about why people in Saskatchewan settled particular locations, including settlement patterns before and after coming together of First Nations and European peoples using a variety

of maps (e.g., near waterways, sources of water, rail lines, natural resources, low population density in rural areas).

d. Identify the characteristics of the unique geographic regions in Saskatchewan.

**DR4.2 Explain the relationship of First Nations and Métis peoples with the land.**

a. Investigate the traditional worldviews of First Nations peoples prior to European contact regarding land as an animate object and sustaining life force.

b. Research traditional lifestyles of First Nations communities and peoples prior to European contact (e.g., hunting, gathering, movement of people to follow food sources).

c. Explore how the traditional worldviews and teachings of First Nations' Elders regarding land influence the lifestyle of First Nations people today.

f. Assess the impact of historic loss of land on First Nations and Métis people

g. Investigate the process by which decisions were made about the location of reserve lands in Saskatchewan

**DR4.3 Analyze the implications of the Treaty relationship in Saskatchewan**

a. Locate Treaty areas within Saskatchewan and locate reserves within the Treaty area of the school.

b. Investigate conditions which precipitated Treaty negotiations in Saskatchewan.

c. Research Treaty provisions, including the spirit and intent of Treaties as well as material considerations.

d. Assess the benefits of Treaties to all Saskatchewan people

<p><b>K-12 Goal: To examine various worldviews about the use and distribution of resources and wealth in relation to the needs of individuals, communities, nations, and the natural environment and contribute to sustainable development. (RW)</b></p>
--

**RW4.1 Analyze the strategies Saskatchewan people have developed to meet the challenges presented by the natural environment.**

a. List the challenges and opportunities climate presents for residents of Saskatchewan.

d. Collect the natural weather forecasting techniques of Elders, traditional knowledge keepers, senior citizens, and others with local knowledge

- e. Represent the traditions and practices Saskatchewan people developed when faced with isolation, including First Nations practices adopted by Europeans.
- f. Research past and present technologies used to withstand the Saskatchewan climate.

### English Language Arts

**Comprehend and Respond (CR).** Students will develop their abilities to view, listen to, read, comprehend, and respond to a variety of contemporary and traditional grade-level-appropriate texts in a variety of forms (oral, print, and other media) from First Nations, Métis, and other cultures for a variety of purposes including for learning, interest, and enjoyment.

#### **CR4.3 Listen, summarize, paraphrase, and evaluate what was heard and draw conclusions**

- a. Listen critically and respond appropriately to a range of oral communications including oral traditions passed on by First Nations Elders and Knowledge Keepers.
- b. Select and use pertinent before, during, and after strategies to construct meaning when listening.
- c. Understand and apply cues and conventions including pragmatic, textual, syntactical, semantic/lexical/morphological, graphophonic, and others to construct and confirm meaning when listening.
- d. Distinguish between verifiable fact and opinion and analyze the message and presentation for evidence.
- e. Ask thoughtful questions that probe deeper thought and respond to questions with elaboration.
- f. Summarize and paraphrase major ideas and supporting evidence presented in spoken messages and formal presentations.
- g. Follow multi-step directions and instructions independently.
- h. Draw conclusions supported by ideas presented.

## Science

### Life Science: Habitats and Communities (HC)

#### HC4.1 Investigate the interdependence of plants and animals, including humans, within habitats and communities

- a. Identify the plants and animals which can be found in the communities (e.g., house, village, farm, reserve, and city) in which students live.
- b. Differentiate between populations, communities, and habitats using local and regional examples.
- c. Predict and research the populations of plants and animals that exist in various habitats (e.g., desert, farmland, meadow, tree, forest, rain puddle, seashore, lake, river, tropical forest, tundra, river delta, and mountains).
- d. Discuss stories that demonstrate the interdependence of land, water, animals, plants, and the sky in traditional worldviews.
- e. Draw upon facets of Indigenous worldviews, such as the Medicine Wheel or circle of life, to examine understanding about the interdependence of plants and animals in various habitats and communities.
- f. Classify plants and animals, including humans, according to their role(s) (e.g., producer, consumer, herbivore, omnivore, carnivore, predator, prey, scavenger, and decomposer) in food chains and food webs.
- g. Construct a visual representation of a specific food chain that exists within a habitat or community.
- h. Analyze food webs as representations of multiple food chains.
- i. Describe how traditional methods and modern technologies (e.g., time-lapse photography, high-speed photography, and radio collar tracking) both enable humans to increase their knowledge of plants and animals within habitats and communities.
- j. Conduct a simulation or role play to demonstrate the interdependence of plants and animals in a habitat or community.
- k. Predict how the removal of a specific plant or animal population may affect a community in the short-term and long-term.
- l. Observe and maintain a habitat such as a terrarium, aquarium, mealworm box, ant farm, pond in a bottle, or vermiculture to examine interactions between plants, animals, and their environment

#### **HC4.2 Analyze the structures and behaviours of plants and animals that enable them to exist in various habitats**

- a. Generate questions to investigate the structures (e.g., beak shape, colour markings, type of feet, and thorny branches) and behaviours (e.g., seasonal migration, living in groups, and growing towards light) of plants and animals that enable them to exist within various habitats (e.g., schoolyard, wildlife reserve area, creek bank).**
- b. Identify factors (e.g., availability of food, water, and shelter, weather conditions, and available living space) that influence the ability of plants and animals to meet their needs within a specific habitat.**
- c. Recognize that each plant and animal depends on a specific habitat to meet its needs.**
- d. Develop and carry out a plan to investigate, safely and respectfully, the structures and behaviours of plants and animals within natural (e.g., schoolyard, meadow, forest, and park) and constructed (e.g., sports field, aquarium, and terrarium) habitats.**
- e. Record observations and information about plant and animal structures and behaviours within natural and constructed habitats using words, diagrams, graphs, photographs, audio and video recordings, and other appropriate technologies.**
- f. Compile and display data collected during a habitat study using tallies, tables, pictographs, and/or bar graphs, compare results obtained with those of other class members, and propose explanations for differences in results.**
- g. Use information gathered to explain how the structures and behaviours of animals and plants enable them to meet their basic needs (e.g., food, water, air, movement, nutrients, reproduction, and light) in their habitat.**
- h. Compare the structural features of plants that enable them to thrive in different kinds of habitats (e.g., bog, forest, grassland, school yard, garden, and sports field).**
- i. Design and carry out a simulation to explore how the appearance of a plant or animal affects its visibility.**
- j. Predict the structural and behavioural adaptations required for a real or imagined animal to live in a particular habitat, either real or imagined**

**HC4.3 Assess the effects of natural and human activities on habitats and communities, and propose actions to maintain or restore habitats.**

- a. Recognize and respectfully discuss the role of traditional knowledge in learning about, valuing, and caring for plants and animals within local habitats and communities.**
- b. Identify stakeholders who are likely to adopt different points of view on issues (e.g., sewage treatment, urban expansion, deforestation, water pollution, pipeline construction, grassland stewardship, climate change, and pesticide usage) related to habitat protection, restoration, and management that are highlighted in the media.**
- c. Categorize human activities by the effects they have or may have on habitats and communities.**
- d. Assess intended and unintended consequences of natural and human-caused changes to specific habitats.**
- e. Relate habitat loss to the endangerment and extinction of plants and animals within habitats and communities in Saskatchewan and elsewhere.**
- f. Explore how human impact on habitats and communities has been represented through traditional and contemporary music, dance, drama, and visual arts.**
- g. Investigate how knowledge of plant growth and development by scientists and traditional knowledge keepers has led to the development of agricultural methods and techniques (e.g., tillage, hydroponics, nutrient management, pest control, crop rotation, companion plants, and plant breeding) that affect habitats and communities.**
- h. Create dramatic, visual, musical, or other representations to show how personal actions can help conserve, honour, and respect natural and constructed habitats.**
- i. Collaboratively develop and carry out (if feasible) a plan to preserve or restore one or more components of a local habitat.**
- j. Identify local, provincial, and national organizations that work to preserve, restore, and provide education about habitats and communities**

## **Earth and Space Science: Rocks, Minerals, and Erosion (RM)**

**RM4.1 Investigate physical properties of rocks and minerals, including those found in the local environment.**

- a. Pose questions about the properties of rocks and minerals (e.g., What is the difference between rocks and minerals? Where do we find rocks and minerals? Do rocks become minerals?).**
- b. Document the locations and characteristics of rocks that exist in their local environment.**
- e. Demonstrate respect for all components of their environment when observing and collecting rocks and minerals (e.g., do not remove rocks and minerals from private property without permission).**
- g. Record observations of rocks and minerals using jot notes, labelled d charts.**

**RM4.2 Assess how human uses of rocks and minerals impact self, society, and the environment**

- a. Discuss ways in which people of different cultures value, respect, and use rocks and minerals, including First Nations and Métis connections to Mother Earth.**
- b. Identify objects in their local environment that are made from rocks and minerals (e.g., nickel, table salt, pottery, cement, carvings, brick, jewellery, bicycle, nutrients, battery, copper wiring, soda can, plumbing pipe, and sidewalk).**
- c. Research historical (e.g., flint arrowheads, gold jewellery, paint pigments, and coal heating) and contemporary (e.g., fertilizer, building products, ceramics, glass, salt, silver fillings and electronics) uses for rocks and minerals in Saskatchewan.**
- h. Analyze issues related to the extraction and use of minerals from the perspectives of various stakeholders (e.g., company owner, employee, scientist, Elder, environmental group, and end user).**
- k. Assess their own and their family's impact on natural resources based on their current lifestyle**

**RM4.3 Analyze how weathering, erosion, and fossils provide evidence to support human understanding of the formation of landforms on Earth**

- a. Construct a visual representation of the diversity of landscapes and landforms throughout Saskatchewan, including those which have significance for First Nations and Métis people.**
- b. Examine the effects of natural phenomena (e.g., tidal wave, flash flood, hurricane, tornado, earthquake, mud slide, forest fire, avalanche, and meteor impact) that cause rapid and significant changes to the landscape.**
- c. Explain how rocks can be classified as igneous, sedimentary, or metamorphic based on the processes by which they form.**

**k. Discuss how fossils and the fossil record provide evidence of the Earth's history, including the formation of various landforms.**

**l. Predict the types of plant or animal fossils that would be found in Saskatchewan landforms in the past, present, and future.**

**m. Explain how scientists rely on observations and data to develop explanations of natural phenomena.**

**n. Pose new questions about Saskatchewan landforms based on what was learned.**