|  |
| --- |
| SCIENCE | GRADE 7 | LESSON PLAN |
| This sample lesson plan supports Education for Reconciliation through the inclusion of First Nations, Métis, and Inuit perspectives; treaty education; and residential schools’ experiences with learning outcomes identified in the current Alberta Programs of Study for Grades 1 to 9 in Science. Each sample lesson plan includes content(s) or context(s) related to one or more of the following aspects of Education for Reconciliation:* diverse perspectives and ways of knowing of First Nations, Métis, or Inuit, including values, traditions, kinship, language, and ways of being;
* understandings of the spirit and intent of treaties; or
* residential schools’ experiences and resiliency.

Links and relevant information in Guiding Voices: A Curriculum Development Tool for Inclusion of First Nations, Métis and Inuit Perspectives Throughout Curriculum and Walking Together: First Nations, Métis and Inuit Perspectives in Curriculum are provided to support understandings of First Nations, Métis, or Inuit ways of knowing. Both online resources are accessed through LearnAlberta.ca. |
| Education for Reconciliation: Perspective – Ways of Knowing |
| **Program of Studies Outcomes****Developing a Nature of Science Emphasis** * The goal of science is knowledge about the natural world.
* Scientific knowledge develops through observation, experimentation, the discovery of patterns and relationships, and the proposal of explanations.
* Scientific knowledge results from the shared work of many people over time.
* Scientific knowledge is subject to change as new evidence is gathered and new interpretations of data are made.

**Unit B: Plants for Food and Fibre****Focusing Questions:**How do we produce useful plant products? What techniques do we use, what knowledge are these techniques based on, and how do we apply these techniques in a sustainable way?1. Investigate plant uses; and identify links among needs, technologies, products and impacts.
	* describe human uses of plants as sources of food and raw materials, and give examples of other uses (*e.g., identify uses of plants as herbs or medicines; describe plant products, and identify plant sources on which they depend*).

Mutual Respect* Appreciate that scientific understanding evolves from the interaction of ideas involving people with different views and backgrounds (*e.g., show awareness of the diversity of agricultural practices used by societies around the world at different times through history; appreciate the role of Aboriginal knowledge in identifying useful herbs and medicines*).

**Cross-curricular Linkages****Fine Arts: Art****Articulate and Evaluate:** Students will learn to use the basic vocabulary of art criticism in descriptions of their work.1. Discussing one’s responses to one’s own drawings and images is part of learning to talk about art.

**Resource[[1]](#endnote-1)** Belcourt, Christi. *Medicines to Help Us: Traditional Métis Plant Use*. Gabrielle Dumont Institution-Publishing, 2007. **Illustrator:** Christi Belcourt. **Translators:** Rita Flamond and Laura Burnouf. **ISBN:** 978-0-920915-79-0. **Languages:** English & Michif**Summary**: This resource includes traditional Métis artwork that depicts traditional knowledge of plants and their medicinal uses. A companion guide is included.**Purpose**This lesson gives students an understanding of Métis traditional medicines derived from plants that have been passed down through generations in shared teachings from Elders and Knowledge Keepers. Students also see how many of these plants are used in therapeutic remedies today.**Introduction**Ask students what they believe people did to treat ailments prior to the development of the treatments used by today’s medical professionals. Discuss with students how the Métis used plants as traditional medicines and remedies for a variety of health-related issues. Plant use as part of healing practices and medicines was gained from generations of collective knowledge and observations.Ask students if they know what some of these plants are. If so, what part of the plant is used and for what purpose? Share examples with students, such as mint leaves for colds, headaches, and stomach ailments; rat root (Weegas root) for colds, fevers, and upset stomach; and Seneca root for cough, croup, and pneumonia.**Activity/Experience**Provide each student with one of the 27 posters from *Medicines to Help Us: Traditional Métis Plant Use.* Students review the poster and record the medicinal use of the plant, where the plant can be found, and how the plant is used for food and medicine, including the parts of the plant. Students also research the current uses of the plant focusing on its therapeutic properties in their findings.**Conclusion**Have students report their findings back to the class about how each plant was used by Métis for traditional medicine and how the plant is also used in treatments by today’s medical professionals. After students report back to the whole class, students place their poster cards on the classroom wall with the back side facing out to form a gallery artwork print. The arrangement of the cards will form a motif (i.e., jigsaw format). Discuss the floral motif displayed and how it depicts the connection between the Métis and the plant world. **Extension**Working individually or in groups, students investigate Cree, Blackfoot, or Inuit uses of plants (e.g., food, teas, types of medicines). Encourage students to present their findings creatively (e.g., using presentation software or creating collages). Each student could record the information in a chart that allows the class to compare and contrast the differences in the local environments and the plants that are found and used.Plan a field trip to go on the land with an Elder or Knowledge Keeper who could share wisdom about the changing nature of the land over time as it related to land use for growing plants. Have students identify local plants that are used as food and medicine.**Assessment for Student Learning**Consider multiple ways students can demonstrate their understandings of Métis ways of identifying and using plants for traditional medicine and how many of these plants continue to be used as remedies today.**Keywords:** plants; relationships; kinships; reciprocity; traditional medicine**Themes:** kinships; reciprocity; medicinal plants; traditional knowledge**Teacher Background**[[2]](#endnote-2)Paquin, Todd. *Traditional Métis Medicines and Remedies*. Gabriel Dumont Institute of Native Studies and Applied Research, 2003. Accessed from Virtual Museum of Métis History and Culture([www.metismuseum.ca/resource.php/00721](http://www.metismuseum.ca/resource.php/00721))Ziegler, Anna, Alasi Joamie, and Rebecca Hainnu. *Walking with Aalasi: An Introduction to Edible and Medicinal Arctic Plants.*Inhabit Media, 2009. **ISBN:** 978-0-9782186-7-6. **Languages:** English and Inuktitut**Summary:** A story that shares the life of Alasali and the teachings she learned from 18 plants that are observed and harvested in Pangnirtung, Niaqunnguuq, and across Nunavut.**Centre for Indigenous Environmental Resources*** ***Sagow Pimachiwin*** (guidebook) ([www.yourcier.org/uploads/2/5/6/1/25611440/sagow\_pimachiwin\_guidebook.pdf](http://www.yourcier.org/uploads/2/5/6/1/25611440/sagow_pimachiwin_guidebook.pdf))

**Summary:** This resource features plants and animals used by the Mikisew Cree First Nation for food, medicine, and materials.**Niitsitapiisinni: Stories and Spaces: Exploring Kainai Plants and Culture*** ([galileo.org/kainai/alpine-fir/](http://galileo.org/kainai/alpine-fir/))

**Summary:** A plant index that provides a wealth of information regarding use of plants. Descriptions are written in both Blackfoot and English and include a picture of each plant. **Walking Together: First Nations, Métis and Inuit Perspectives in Curriculum (Alberta Education)** * Traditional Environmental Knowledge([www.learnalberta.ca/content/aswt/#/traditional\_environmental\_knowledge](http://www.learnalberta.ca/content/aswt/#/traditional_environmental_knowledge))

([www.learnalberta.ca/content/aswt/](http://www.learnalberta.ca/content/aswt/))**Guiding Voices: A Curriculum Development Tool for Inclusion of First Nations, Métis and Inuit Perspectives Throughout the Curriculum (Alberta Education)*** [Relationships](http://www.learnalberta.ca/content/fnmigv/index.html) ([www.learnalberta.ca/content/fnmigv/index.html](http://www.learnalberta.ca/content/fnmigv/index.html))

**Our Words, Our Ways: Teaching First Nations, Métis and Inuit Learners (Alberta Education)*** ([education.alberta.ca/media/3615876/our-words-our-ways.pdf](https://education.alberta.ca/media/3615876/our-words-our-ways.pdf))
 |

1. Some resources may not be authorized but are provided to identify potentially useful ideas for teaching and learning. The responsibility to evaluate these resources rests with the user. The selected resource(s) provide a perspective specific to an individual, group, or nation; they are not intended to represent the perspectives of all First Nations, Métis, or Inuit. [↑](#endnote-ref-1)
2. All website addresses listed were confirmed as accurate at the time of publication but are subject to change. [↑](#endnote-ref-2)