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| SCIENCE | GRADE 3 | 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 – Traditions |
| **Program of Studies Outcomes****Topic B: Building with a Variety of Materials**Students use a variety of tools and simple techniques to build things for specific purposes. **3-7 Construct structures, using a variety of materials and designs, and compare the effectiveness of the various materials and designs for their intended purposes.*** Identify the intended purpose and use of structures to be built, and explain how knowing the intended purpose and use helps guide decisions regarding materials and design.
* Understand that simple designs are often as effective as more complex ones, as well as being easier and cheaper to build, and illustrate this understanding with a practical example.

**Topic C: Testing Materials and Designs**Students study the materials and designs used in construction tasks. . . . Throughout the topic, students learn that many things are considered when materials and designs are selected and that different tasks may require different materials and designs.**3-8 Evaluate the suitability of different materials and designs for their use in a building task.*** Recognize that functional structures must be sufficiently strong and stable and that unstable or weak structures are often unsafe to use.
* Compare and evaluate the strength and stability of different models or objects constructed.
* Describe the distinctive properties of some common solids, such as wood, paper or plastic, that make them suitable for use as building materials.
* Identify and apply methods for making a structure stronger and more stable; e.g., by adding or joining parts to form triangles.

**Cross-curricular Linkages****Mathematics****Shape and Space (3-D Objects and 2-D Shapes)**Describe the characteristics of 3-D objects and 2-D shapes, and analyze the relationships among them.**Resource[[1]](#endnote-1)**Cutting, Robert. *House and Home*. Rubicon Publishing Inc., 2012. **ISBN:** 978-1-77058-332-0. **Language:** English**Summary**: This non-fiction text is part of a series from Turtle Island Voices. Combined with excellent visuals, this informational book describes various First Nations, Métis, and Inuit traditional homes once found across Canada, including igloos, wigwams, longhouses, tipis, pit houses, and log houses. **Purpose**This lesson provides students with an understanding of the concepts and principles related to the diverse methods of construction of First Nations, Métis, and Inuit structures or homes (e.g., their intended purpose and the various tools, techniques, and materials used).**Introduction**Discuss with students what contemporary basic structures are used for homes and schools (e.g., concrete structures, wooden, or steel frames). Continue the discussion about the many different traditional First Nations, Métis, and Inuit home structures, such as an igloo (iglu in Inuit), wigwam, longhouse, tipi, pit house, and log house.Students can investigate what natural materials and tools are available in an environment (e.g., arctic, plains, forests) to construct homes. Consider how the choice of dwelling reflected the way of life of First Nations, Métis, and Inuit (e.g., seasonal patterns and migrations). **Activity/Experience**Students research and create a structure based upon one of the traditional homes in which First Nations, Métis, and Inuit lived. In groups or as individuals, students select a traditional structure and build a scale model of their choice.Students prepare a short written report that features (or highlights) how their structure was made and describes the materials and designs that were used to make it strong and stable. Students should be respectful of the technology that was used to build the structure, and the report should identify how the structure reflects the environments in which people lived in and what resources were available. Other interesting features about their structure should also be included.**Conclusion**Students present their structures and their findings to the class. **Extension**Students conduct further research into the designs of traditional homes and how they are reflected in today’s structures. Students explore ways that new designs could be created based on the different First Nations, Métis, and Inuit structures and natural materials in the environment. Students can build structures using 3-D objects.**Assessment for Student Learning**Consider multiple ways students can demonstrate their understandings of various First Nations, Métis, and Inuit structures and the importance to their way of life.**Keywords:** structure; igloo; iglu; wigwam; longhouse; tipi; pit house; log house; dwelling**Themes:** home; ancestors; place**Teacher Background**[[2]](#endnote-2)First Nations and Inuit structures were designed utilizing the natural materials and tools available in the environment and met their ways of life (e.g., seasonal patterns and migrations). Techniques used to build these homes were often a reflection of their particular culture and teachings connected to their way of life. Suggested materials students can use include wood skewers, tissue paper, paper (tipi), pencils/wooden rods, small twigs/tree suckers, Plasticine/modelling clay, stir sticks, elastics and/or string, white glue or a hot glue gun, sticky tack, and cardboard.**Supporting Information for Construction*** How to build an igloo (<https://www.youtube.com/watch?v=R-x5QOSqP3E>)
* Basic Wigwam Construction ([www.nativetech.org/wigwam/construction.html](http://www.nativetech.org/wigwam/construction.html))
* How to Build a Longhouse for a Third Grade School Project ([www.ehow.com/how\_6535833\_build-third-grade-school-project.html](http://www.ehow.com/how_6535833_build-third-grade-school-project.html))
* Wonderville: Build a Tipi! ([www.learnalberta.ca/content/wonbt/html/index.html](http://www.learnalberta.ca/content/wonbt/html/index.html))
* How to Build a Pithouse (photos) ([www.flickr.com/photos/prehistoricmuseum/sets/72157644987472907/](http://www.flickr.com/photos/prehistoricmuseum/sets/72157644987472907/))
* Building a log house ([www.palmatin.com/building-a-log-house-get-started/](http://www.palmatin.com/building-a-log-house-get-started/))

**Walking Together: First Nations, Métis and Inuit Perspectives in Curriculum (Alberta Education)*** Culture and Language – Exploring Connections – Videos – Tipi Teachings ([www.learnalberta.ca/content/aswt/#/culture\_and\_language/exploring\_connections/videos/tipi\_teachings](http://www.learnalberta.ca/content/aswt/#/culture_and_language/exploring_connections/videos/tipi_teachings))

([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)*** Ancestors, Time and Place ([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))
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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)