



Canadian Landscapes

Grade 5 Lesson Plan

Lesson #2: Canadian Landscapes

Duration: 80 mins

Subjects: Science, Social Studies

Topic: Physical Geography of Canada

Overview

Students explore the different landscapes and geological formations across Canada, in the Peace Region and in the Tumbler Ridge UNESCO Global Geopark (TRUGG) using Google Earth and other resources. Developing their mapping and geography skills, students learn to distinguish Canadian provinces and territories based on their landscapes.

Lesson Objectives

Students will be able to:

- Use digital technology, such as Google Earth, and other resources to observe geological formations in Canada
- List geological formations that are present in Canada, the Peace Region and the TRUGG
- Describe differences in the landscape across Canada
- Distinguish between Canadian regions, such as The Prairies and Western Canada, based on their respective landforms

Curriculum Connections

Please see the *TRUGG Education Toolkit Curriculum Connections Matrix* for specific connections of this lesson to the B.C. Curriculum for Grade 5.

Materials

- Computer and digital projector
- Access to the Internet, library and/or other resources to support student research
- *Geology in the TRUGG* Slideshow and Teacher Notes
- *Canada and its Geological Formations* Student Handout

Teacher Prep

- Arrange access to computers, the Internet or library access and/or other resources for student research.
- Review through the *Grade 5 Module Teacher Backgrounder* and the Background Information section of this lesson.
- Review the Background Information (and other resources as needed) to ensure you have a clear understanding of key concepts explored in this lesson.
- Review the Tumbler Ridge UNESCO Global Geopark website: www.tumblerridgegeopark.ca.
- Print and photocopy a class set of the *Canada and its Geological Formations Student Handout*.

Background Information

Canada is a vast and beautiful country made up of an incredibly rich landscape. It is comprised of seven physiographic regions: Arctic Lands, Cordillera, Interior Plains, Hudson Bay Lowland, Canadian Shield Forest Lands, St Lawrence Lowlands, and Appalachia. Each of these physiographic regions has different landscapes and these help us to visualize each part of Canada (e.g. Prairies as the center of Canada, Rockies in Western Canada, etc.).

The TRUGG surrounds the town of Tumbler Ridge, B.C. and has features representative of both the Cordillera and Interior Plains physiographic regions. Moreover, it is located where there was once an ancient inland sea known as the Western Interior Seaway. Once teeming with life, the seaway left behind a wide array of fossils and artifacts, including dinosaur trackways.

This lesson also provides a guided inquiry that students will build on in Lesson 3. Students can work in partners or groups on this assignment, as desired, and will need to have access to the Internet and/or the library.

Encourage students to think critically and communicate effectively about the variety of landforms and geological features that they see throughout the lesson, especially in regards to the types of animals and careers that may be supported within each region they study.

Note that students may need considerable guidance with regard to the inquiry and research process, especially using Google Earth. You may wish to provide support on specific skills, such as identifying key words and search terms for research, finding specific places on Google Earth, and understanding the different landforms that are present from a bird's eye view. Students can work in pairs or small groups, as desired.

Please see the *Tumbler Ridge UNESCO Global Geopark Teacher Backgrounder* for more background and details on the Geopark.

Lesson Activities

Introduction/Hook:

1. Present the Lesson 2 section of the *Geology in the TRUGG* Slideshow using the Teacher Notes, as needed (note: you may wish to review earlier slides with students especially if you have not completed Lesson 1).
2. Have a class discussion about the geological formations involved, including:
 - a. What different geological formations do you see?
 - b. How do the landscapes differ?
 - c. What is the most interesting formation or landscape in your opinion?

Activity 1:

Part 1

1. Ask students to visualize the landscape that surrounds the area they live in. Have students (partnered up or individually) use a computer or laptop to access Google Earth and explore (from a bird's eye view) the landscape of Canada.
 - a. Instruct students to find www.google.com/earth.
 - b. Once there, they can click 'Launch Google Earth.'
 - c. Next, students can click on the 'arrow' which allows them to have a guided lesson on Google Earth and how it works, what it can show you, etc.
 - d. On the left-hand side of the browser, there is a magnifying glass that enables you to start your specific search. Once students have clicked on that, they can type in 'Canada' in the search bar.
 - e. They can use the '+' symbol in the lower right corner of the screen to zoom into Canada.
2. Distribute the *Canada and its Geological Formations* Student Handout. As students are looking at Canada, they will see different landscapes and geological formations. In pairs (or individually), have students fill in the geological features they see when they zoom into specific parts of our country. You may want to show students where specific landscapes are found (e.g., Prairies are located in the middle of Canada, the Maritimes are located on the east coast of Canada, the Canadian Shield is located in a horseshoe shape around northern Manitoba, Ontario and Quebec).

Part 2

1. Continue using Google Earth and ask students to zoom in on British Columbia, specifically: the Cariboo, Chilcotin and Coast; Kootenay Rockies; and Vancouver Island.
2. Have students complete their table under the British Columbia section (page 2) of the student handout. Ask students what types of landscapes they noticed and what they recorded in their table under British Columbia.

Part 3

1. Ask students to continue zooming into Northern British Columbia and the Peace Region (including the TRUGG). Have students note geological formations they notice in the Peace Region on the third page of their handout.
2. From there, ask students to zoom in and locate the Tumbler Ridge UNESCO Global Geopark (they can also search it in the search bar on the left) and note geological formations and features they notice and record these in their table. Some suggested geological formations and features to try to find include:
 - a. Kinuseo Falls
 - b. The Shipyard and Titanic Rock
 - c. Flatbed Creek
 - d. Monkman Provincial Park
3. Ask students to complete page 4 of the *Canada and its Geological Formations* Student Handout.

Closure:

1. Have a class discussion about similarities and differences students noticed in landforms/geological formations in the Peace Region and the Tumbler Ridge UNESCO Global Geopark compared to the rest of B.C. and Canada.

Assessment/Evaluation

- Observe the students during Activity 1, and assess their ability to conduct research using digital tools.
- Review and assess each student's *Canada and its Geological Formations* Student Handout.

Extensions

- Have students investigate the geological formations in other UNESCO Global Geoparks on Google Earth, including Percé UNESCO Global Geopark and Stonehammer UNESCO Global Geopark.
- Arrange for students to go on a field trip to a local park to investigate the local geological formations and rock types.