

Lesson Five: Wyoming's Unique Terrain

Grade Level: 2nd Grade

Time: 30-45 minutes

Essential Question: How can we be stewards of Wyoming's public and private lands to benefit current and future generations?

Objectives: Students will:

- Identify and describe the different types of Wyoming terrain.
- Explain how to be stewards of each type of Wyoming terrain.

Purpose: Students learn about the different types of terrain found in Wyoming and the uses of each.

Required Materials/Resources:

- Terrain Type! document (copy for teacher)
- Video: <u>http://www.eyexpo.com/vr/YellowstoneNationalPark/</u> *America's National Parks: Best of Yellowstone.* (Source 3) *Video length: 4 minutes*
- Student Journals OR notebook or printer paper to make Student Journal pages (one per student)
- Sticky notes (optional for step 4)
- "We Are Stewards" chart from lesson one (optional for step 4)
- Terrain Type photos from Lesson 3

TEACHER NOTE: If technology is available, allow students to manipulate the virtual field trip on their own device. This addresses CVE standard CV5.5.4.

Suggested Teacher Preparation:

- Open the Yellowstone tour link and select video clips from the virtual tour ahead of time.
- Decide if you will show the video or decide if students will use individual devices.
- Think of a few more examples for step 4.
- Decide if you will have students write in their journal in step 4 or use a Post-it note.
- Display the Terrain Type Photos in different corners of your classroom.
- Prepare Student Journal pages by typing/writing the following sentence stems on notebook/printer paper OR write the following sentence stems in Student Journals:
 - My favorite type of terrain is ______
 - One way I can be a steward of that terrain is

Standards:

Social Studies: SS2.5.2 (Explicit), SS2.6.3 (Practiced/Encountered)

ELA: 2.SL.1, 2.SL.2, 2.SL.6 (Practiced/Encountered)

CVE: CV5.2.3 (practiced/encountered) CV5.5.4 (See Teacher Note - Practiced/Encountered)

Vocabulary:

- Forest a large area of land covered with trees and underbrush
- **Geothermal** relating to, or produced by the internal heat of the earth
- **Grassland** an area of land on which most of the natural plant forms are grasses
- **Lake** a body of fresh or salt water of considerable size that is surrounded by land
- **Mountain** a raised area of land higher and steeper than a hill
- **Reservoir** a natural or artificial place where water is collected and stored for use
- **River** a large, flowing stream of water (note: creeks and streams are smaller and flow into rivers, but can be used for similar activities)
- Terrain the physical features of an area of land

Instructional Procedure/Steps:

- 1. Begin the lesson by playing TERRAIN TYPE! Say: "In the previous lesson, we learned about different types of terrain in Wyoming. To review, we are going to play a game called TERRAIN TYPE! I will tell you a story about a type of terrain. You are going to decide if my story takes place in a grassland, the mountains, a forest, or a body of water. When you know what I am describing, you CANNOT say the terrain type. Instead, stand up to show you know the terrain type. Each story also has examples of stewardship and of people not being stewards. Listen closely to how the characters are being stewards of the land." Read the TERRAIN TYPE! stories. After each story, have students pair up to discuss what terrain type they think the scenario was about and what in the story led them to think this.
- 2. Say: "Wyoming has many different types of terrain. One special place that you can find all those kinds of terrain is in Yellowstone National Park. Let's take a virtual tour of the park and see if we can identify the many different examples of Wyoming's unique landscape. We will see animals, as well, but your focus needs to be on the terrain the animals are living in." Show the virtual tour:

http://www.eyexpo.com/vr/YellowstoneNationalPark/, or allow students to access the virtual tour of Yellowstone on their individual devices. Either way, be sure to walk through the virtual tour in order to see all of the aspects available. Be sure to point out the unique terrain of mountains, grasslands (bison portion), forests, bodies of water, and geysers/geothermal features by asking "What did you notice that was different or special right here?" Geyser parts, bison areas, waterfalls

TEACHER NOTE: If students are able, they should use technology to manipulate the virtual field trip themselves.

TEACHER NOTE: Choose the method for pairing students based on what works in your classroom. Some examples are: turn and talk, shoulder partners, pair up.

TEACHER NOTE: Students should come up with their own new activity. It cannot be one of the examples that was used.

- 3. After watching the virtual tour, direct students to discuss in small groups the following questions:
 - "Do we have any similar types of land/terrain around our town?"
 - "Why do you think Yellowstone was made a national park?" Possible responses: The types of terrain, unique geothermal features
 - "What things do people need to do to keep Yellowstone a special place to visit?"
 - "What would happen if people didn't take care of places like Yellowstone?"
 - "What would happen if people practice stewardship?"

Move between groups to facilitate discussion and check for understanding. After small groups conclude their discussions, come back as a whole group to solidify understanding of the last two bullets. Key points to cover are: It is imperative that people follow the rules and laws, so geysers and geothermal features are cared for and maintained, or they will not be here for future generations. It is also important that wildlife rules are followed, so animals don't depend on people for food, and people stay safe and don't get hurt. If we practice good stewardship, geysers, geothermal features, and wildlife will remain cared for and available for the people of Wyoming and tourists for many generations to come.

4. Either pass out Student Journals or a piece of notebook/printer paper for students' journals, or have students write their sentences on Post-it notes and place them on the "WE ARE STEWARDS" chart from Lesson 1. As a check for understanding, direct students to visit their previous entry from Lesson 3: "My favorite way to use public lands is...". Say: "Think about the type of terrain that supports your chosen activity." For example, if a student's favorite activity is fishing at a lake, the terrain is bodies of water. Have students turn to a partner and share the terrain that is used for their activity. Closely monitor responses to check for understanding of terrain types. Display this sentence stem for students: When I (favorite activity) on (type of terrain), I need to be sure I

"When I go hiking on a mountain, I need to be sure I read the rules posted on the trail to be a steward of that land." Provide a couple of your own examples. Once all students have completed the sentence stem in their journals, have the students share their responses with a partner. Say: "We now know about terrain, the terrain in Wyoming, what we can do with our terrain, and that Wyoming is unique because of everything it can offer with its terrain."

Assessment: Play the 4 Corners game. Say: "We need to be stewards of our private and public lands in Wyoming. This includes taking care of all of our different types of terrain since terrain is one of the reasons that makes Wyoming unique. We need to be stewards of our lands to make them last for future generations. In this game, we will identify which terrain is being utilized for certain activities and how we can be stewards while we are using that terrain. Notice that I have posted our four Terrain Type Photos in different parts of the room. They are mountains, forest, grassland, and bodies of water: lakes, rivers, reservoirs. I will call out an activity, and you will walk to the area of the room with the terrain you think you can do that activity in. You will then discuss why you chose that area and how you can be a **steward while doing the activity I named."** Be aware that there may be more than one right answer, so students need to explain their reasoning. Once students are at their spots and have discussed why they chose that terrain, have students turn and talk about how they can be a steward of that terrain while they are performing that activity. Call out a certain activity such as: fishing, hiking, camping, animal **grazing, swimming, hunting, etc.** Repeat process as many times as time allows or student clarification is needed. Some examples of stewardship are: picking up, not littering, respecting the wildlife, staying on trails, following the rules, not damaging things, etc., so all peopled may enjoy it now and in

years to come. W	hen finished with the game, have students
return to their so	eats and write in their journals one way they
can be a steward	d of their favorite terrain using the following
sentence stems:	My favorite type of terrain is
·	One way I can be a steward of that
terrain is	Collect journals when students are all
finished, and ch	eck that responses support the definition of
stewardship.	

Credits/Sources:

- National Geographic Society. (1996-2017). Mountains.
 Retrieved August 8, 2017, from
 http://www.nationalgeographic.com/science/earth/surfac-e-of-the-earth/mountains/
- Softschools.com. (2005-2017). Grassland Biome Facts.
 Retrieved August 8, 2017, from
 http://www.softschools.com/facts/biomes/grassland_biome-facts/165/
- 3. natgeotv.com. (n.d.) *America's National Parks: Best of Yellowstone*. Retrieved August 8, 2017, from http://www.eyexpo.com/vr/YellowstoneNationalPark/
- 4. Wyoming Game & Fish Department. (2011-2018). *Hunting in Wyoming.* Retrieved August 24, 2018, from https://wgfd.wyo.gov/Hunting/What-do-l-need-to-Hunt