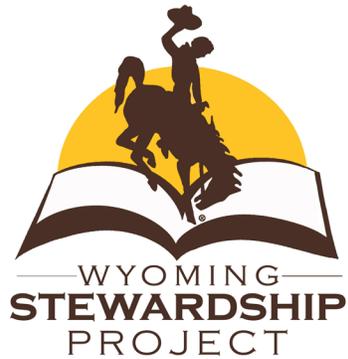




— WYOMING —
STEWARDSHIP
PROJECT

2nd Grade

**Outdoor Recreation & Tourism
Unit**



2nd Grade Outdoor Recreation & Tourism

TABLE OF CONTENTS

Standards Map

Educator Essentials

Lesson 1: Mine, or Ours?

Lesson 2: What is Public? What is Private?

Lesson 3: Wyoming – Land of Many Uses

Lesson 4: Modeling Hills and Valleys

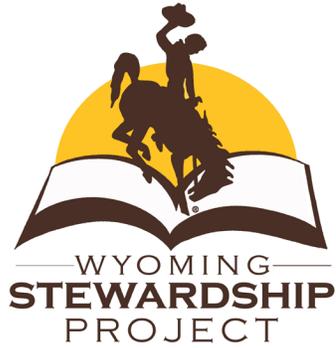
Lesson 5: Wyoming's Unique Terrain

Lesson 6: How to Be a Steward?

Lesson 7: Cityscapes or Open Spaces?

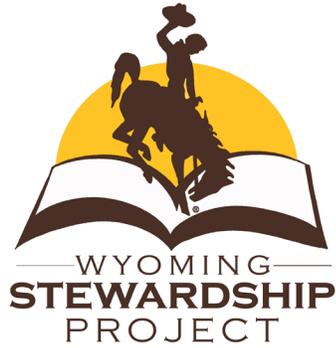
Lesson 8: Discovering Wyoming's State Parks

Glossary



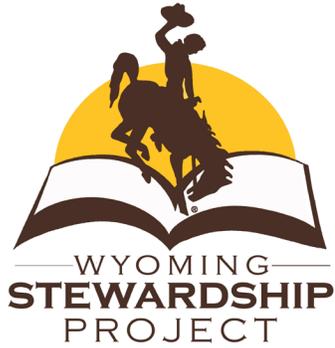
2nd Grade Outdoor Recreation & Tourism Standards

Day	Lesson Title	Science		Social Studies	
		Explicitly Taught	Practiced/ Encountered	Explicitly Taught	Practiced/ Encountered
1	Lesson 1: Mine or Ours?			SS2.4.1	
2	Lesson 2: What is Public? What is Private?			SS2.5.2	SS2.5.1
3	Lesson 3: Land of Many Uses: Wyoming Public Lands			SS2.5.2	
4, 5	Lesson 4: Mapping in 3-D	2-ESS2-2		SS2.5.1, SS2.5.2	
6	Lesson 5: Wyoming's Unique Terrain			SS2.5.2	SS2.6.3
7-10	Lesson 6: When I Grow Up...			SS2.1.1, SS2.1.4	SS2.6.3
11	Lesson 7: Cityscapes or Open Spaces?			SS2.5.3, SS2.5.4	SS2.2.2, SS2.5.2
12-15	Lesson 8: Discovering Wyoming's State Parks				SS2.1.1



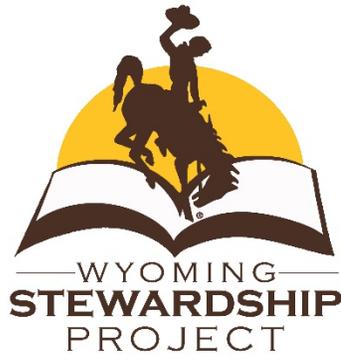
2nd Grade Outdoor Recreation & Tourism Standards

Day	Lesson Title	ELA		Math	
		Explicitly Taught	Practiced/ Encountered	Explicitly Taught	Practiced/ Encountered
1	Lesson 1: Mine or Ours?		2.SL.1, 2.SL.6		
2	Lesson 2: What is Public? What is Private?		2.SL.1, 2.SL.6		
3	Lesson 3: Land of Many Uses: Wyoming Public Lands		2.SL.1, 2.SL.6		
4, 5	Lesson 4: Mapping in 3-D		2.SL.1, 2.SL.2		
6	Lesson 5: Wyoming's Unique Terrain		2.SL.1, 2.SL.2, 2.SL.6		
7-10	Lesson 6: When I Grow Up...		2.W.8		
11	Lesson 7: Cityscapes or Open Spaces?		2.SL.1, 2.SL.2		
12-15	Lesson 8: Discovering Wyoming's State Parks	2.W.7, 2.W.8	2.W.2		



2nd Grade Outdoor Recreation & Tourism Standards

Day	Lesson Title	CVE		Health	
		Explicitly Taught	Practiced/ Encountered	Explicitly Taught	Practiced/ Encountered
1	Lesson 1: Mine or Ours?		CV5.1.4		
2	Lesson 2: What is Public? What is Private?		CV5.3.1, CV5.4.4		
3	Lesson 3: Land of Many Uses: Wyoming Public Lands		CV5.4.1		
4, 5	Lesson 4: Mapping in 3-D		CV5.1.4, CV5.3.1		
6	Lesson 5: Wyoming's Unique Terrain		CV5.2.3 , CV5.5.4		
7-10	Lesson 6: When I Grow Up...		CV5.1.1, CV5.3.1, CV5.4.4, CV5.5.1		
11	Lesson 7: Cityscapes or Open Spaces?		CV5.4.4		
12-15	Lesson 8: Discovering Wyoming's State Parks		CV5.1.4, CV5.3.2, CV5.4.1, CV5.4.4		



Dear Educator,

I am honored to introduce you to the Wyoming Stewardship Project. I want you to know this unit was written with you and your students in mind. Developing this project has been a thoughtful process and multi-year commitment to offer lessons for classrooms across the state.

Wyoming educators, in collaboration with field experts and the Wyoming Department of Education, wrote, piloted, and revised the unit you are about to teach in your classroom. We are tremendously grateful for their efforts. These units are not intended to be a burden but were created purposefully to be easy-to-use, cross-curricular, and comprehensive. Units build on each other throughout the grades. However, they can be used independently without loss of integrity.

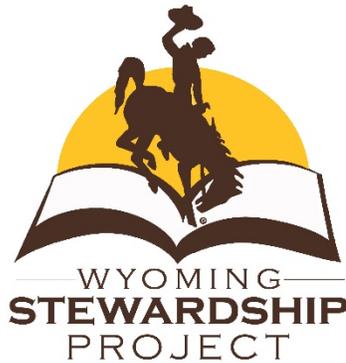
Found in the Educator Essentials document is everything needed to be prepared to teach this unit. We outline the Higher Order Thinking Skills and how to identify them throughout the units. We have compiled a material list of everything you need to complete all lessons: worksheets, PowerPoints, and video links are included in individual lessons. Additionally, a '101' sheet has been included to give you background information for the highlighted industry in Wyoming.

Our hope for the Wyoming Stewardship Project is to empower students to be our critical thinkers and problem solvers of tomorrow. We believe the stewardship definition captures the overall intent: As Wyoming citizens, we are stewards entrusted with the responsible development, care, and use of our resources to benefit current and future generations.

Thank you again for your effort in the classroom, presenting these lessons to your students, and helping advance this pivotal project for our state. Please don't hesitate to contact us with questions!

Jessie Dafoe

Executive Director
Wyoming Agriculture in the Classroom



Teacher Preparation and Required Materials

Higher Order Thinking Skills:

The critical work of Higher Order Thinking Skills (HOTS) involves breaking down complex material into parts, detecting relationships, combining new and familiar information creatively within limits set by the context, and combining and using all previous levels in evaluating or making judgments. Within each lesson you'll find reference to the Higher Order Thinking Skills that are part of the work students will be doing using language from Bloom's Taxonomy: Analysis, Synthesis, Application, and Evaluation.

- Analysis skills are used in areas with this symbol: 
- Synthesis skills are used in areas with this symbol: 
- Application skills are used in areas with this symbol: 
- Evaluation skills are used in areas with this symbol: 

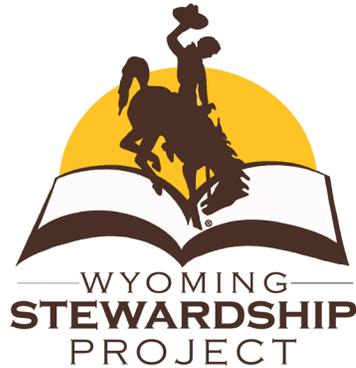
The following ideas and content will be important to know for this unit:

- Have a deep understanding of stewardship.
- Be able to explain the difference between 2D and 3D.
- Read Lesson 6 in its entirety before beginning it.
- Be able to describe the purpose of a brochure to students and how a brochure promotes stewardship.

- Be able to explain the purpose of and model paraphrasing information from a source into your own words.

The following materials will be needed for this unit:

- Chart paper
- Sticky Notes
- Tape
- Glue
- Student Journals OR notebook/printer paper to make Student Journal pages
- Printer paper
- Markers, colored pencils
- Playdough/clay/salt dough (salt, flour, water, and a bowl are necessary if you are making the salt dough recipe included in Lesson 4.)
- Cookie sheets (optional for Lesson 4)
- Cardboard sheets (optional for Lesson 4)
- Access to a laminator
- Large space (your classroom with desks moved, outdoor space, or gym)
- Crumpled up pieces of paper (at least 2 per student)
- Timer
- Tape/chalk
- Talking chips, blocks, counters, etc.
- Highlighters
- Guest speaker from Wyoming Game and Fish Department, or other land management agency (optional for Lesson 6)
- Field trip to local state park, or have an employee from the State Park come to your class to share information (optional for Lesson 8)



Outdoor Recreation & Tourism 101

Wyoming Outdoor Recreation & Tourism at a glance:

The below bullet points are taken directly from the *Wyoming Travel Impacts, 2000 – 2016 Report* prepared by Dean Runyan Associates. This addresses overall travel and tourism but gives a good indication of the importance of this industry.

STATE SUMMARY: DIRECT IMPACTS OF TRAVEL IN WYOMING

- Travel spending by all domestic and international visitors in Wyoming was approximately \$3.2 billion in 2016. This is equivalent to approximately \$8.9 million dollars per day.
- Overall, travel spending in Wyoming has increased 4.3 percent per year since 2000. In constant dollars (adjusted for inflation), travel spending has increased by about 2.7 percent per year over the same period.
- Visitors who stayed overnight in commercial lodging facilities spent \$1.8 billion in 2016 - more than half (58 percent) of all visitor spending in the state. Visitors who stayed in public and private campgrounds spent \$563 million, or about 18 percent of all visitor spending.
- During 2016, travel spending in Wyoming directly supported approximately 32,000 jobs with travel-generated earnings of \$894 million. Travel spending generated the greatest number of jobs in accommodations, recreation, and food service industries.
- Local and state tax revenues generated by travel spending were about \$171 million in 2016 (property taxes not included). Without these, travel generated tax revenues, each household in Wyoming would

have had to pay an additional \$730 in taxes per year to maintain these current state and local tax revenues.

Wyoming Outdoor Recreation & Tourism Overview

Below this overview is a table that displays land ownership and who owns/manages the land. We encourage every teacher to review this before teaching this unit. While many of these lessons focus on public land, it is important to recognize that private land also plays an important role in recreation and tourism. Private landowners grant access for hunting and fishing, establish hunting and dude ranches, and contribute to the open spaces and wildlife habitat that make Wyoming so desirable for recreation and tourism.

The beautiful landscape of northwest Wyoming attracted the attention of settlers, and scientists alike. Wyoming pioneered the first national park, first national monument, and first national forest, making this unique land a hot spot for early tourists.

In 1872, before Wyoming was even a state, President Ulysses S. Grant designated Yellowstone as the nation's first national park. Yellowstone is home to remarkable hot springs, geysers, and wildlife. Its fame draws people worldwide to experience the breathtaking sights and natural beauty.

In 1906, the northeastern side of Wyoming became home to the first national monument. Devils Tower, a geological wonder, was handed this designation by President Theodore Roosevelt. This volcanic tower rises 867 feet from summit to base. On average, over 400,000 visitors come to hike around its base or climb its columns. Another outdoor first for Wyoming was the Shoshone National Forest. Created in 1891, it remains one of the wildest parts of the continental United States. This forest provides chances for people to hunt, hike, camp, and fish.

Wyoming became known world-wide through Buffalo Bill Cody's Wild West Show, which sensationalized the wild West. Wyoming continues to welcome tourists who are seeking a taste of the West and take pleasure in Wyoming's extraordinary lands. The state hosts an average of 8.5 million overnight visitors a year. These travelers and the people in Wyoming have the chance to enjoy the diverse landscape from mountains to vast grasslands.

Nearly half (48%) of Wyoming is federal public land, and the State of Wyoming owns another 5.6%. Not only does Wyoming have beautiful scenery, it offers history in various forms. In addition to the Ft. Laramie National Historic Site, there are twenty-five Natural Historic Landmarks and two national monuments, Devils Tower and Fossil Butte. To keep these destinations accessible, private land owners, along with state and federal agencies, such as the Wyoming Game and Fish Department, National Forest Service, and Bureau of Land Management work to provide balance in conserving these resources for future generations.

Wyoming Lands

LANDOWNERS	Acres	Sq Miles	%
United States Government			
National Park Service	2,223,083	3472	3.50
Forest Service	9,166,805	14324	14.62
Fish and Wildlife	72,449	112	0.12
Bureau of Land Management	17,508,808	27359	27.92
Bureau of Indian Affairs	1,540,133	2407	2.46
Bureau of Reclamation	411,985	644	0.66
Other Federal Managed Lands	78,054	121	0.12
Wyoming			
State Lands	3,612,571	5642	5.76
State (State Parks & Hist. Sites)	61,319	96	0.10
State (Wyoming Game and Fish)	187,747	294	0.30
Local Government	9,701	15	0.02
Surface Water	435,596	681	0.69
Total Private	27,406,262	42820	43.70
Total Public	35,308,251	55169	56.30
TOTAL AREA	62,714,513	97,987	

Source: Information compiled by Wyoming Association of Conservation Districts - 2017. Statistical information obtained from 2014 Bureau of Land Management dataset.

Land Ownership

Private Property

Private property rights are fundamental to Wyoming. Private property includes land owned by a person or group and kept for their exclusive use. Every person has the right to own private property and enjoy using it. This also includes the right to prohibit other people from using it. The Wyoming Constitution protects private property rights from the government taking ownership of the land (eminent domain) or by other people taking ownership of the land by stating "Private property shall not be taken for private use unless by consent of the owner, except for private ways of necessity, and for reservoirs, drains, flumes or ditches on or across the lands of others for agricultural, mining, milling, domestic, or sanitary purposes, nor in any case without due compensation." Furthermore, "Private property shall not be taken or damaged for public or private use without just compensation."

Students should be aware of the importance of private property in Wyoming and the understanding that someone who does not own a certain parcel of private land cannot cross or be on that land for recreation or tourism use without permission from the owner. Private property use is respected under the law. Many private landowners do create access for recreation in providing hunting and fishing opportunities as well as development access. However, if someone wants to cross land they do not own, they must acquire permission, generally by purchasing certain rights to use the land from the person who owns the land.

State lands

State lands include land granted to the state of Wyoming by the United States upon the admission of Wyoming to the Union; these lands are commonly known as State Trust Lands. According to the Office of State Lands and Investments, "When Wyoming became a state on July 10, 1890, the federal government granted approximately 4.2 million acres of land (known as State Trust Lands) to the State of Wyoming. The law requires state land to be held in trust to produce income to support public schools and other state institutions named in the original grants." These lands held by the State of Wyoming provide a huge benefit for our youth and their education by generating income from leasing land for livestock grazing, outfitting, energy

production and mineral production. Students should understand the importance of stewardship of this land to be managed in a way that promotes sustainable multiple use while providing income to the institutions which the land was granted to benefit.

For example, there are other state lands, such as the University of Wyoming land, that are owned by the University and used for its research and other purposes. Another category of State land includes State parks. State parks, much like national parks, are reserved to be enjoyed by the public for recreation and tourism and do not generate income through development. Additionally, there is specific Wyoming land managed by the Wyoming Game & Fish Department.

Federal lands

Federal lands have six primary administrating agencies: Bureau of Land Management (BLM), Forest Service (FS), Fish and Wildlife Service (FWS), National Park Service (NPS), the Department of Defense (DOD), and the Bureau of Reclamation (BOR). The BLM, FS, FWS, and NPS lands are the primary agencies/federal land focused on by the Wyoming Stewardship Project.

DOD lands consist primarily of military bases and training ranges. The BOR has projects in 17 western states including Wyoming. The Wyoming Stewardship Project does not focus specifically on these projects/land areas.

The BLM, FS, NPS, and FWS have unique missions for each agency. BLM and FS lands are managed under the principles of multiple use and sustained yields. For other lands, such as wildlife refuges managed by FWS, the land is managed for wildlife with only limited private economic uses. By and large, the other federal land is managed for a wide range of multiple uses including the timber harvest, mining and oil and gas development, grazing, outfitting, recreation, wildlife habitat, water supply protection and other productive uses of the land.

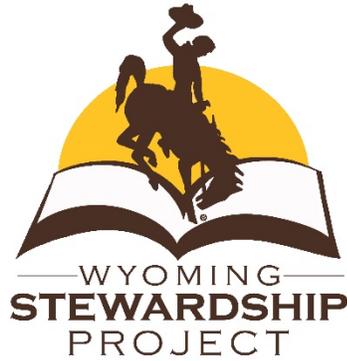
National parks, on the other hand, are set aside primarily for site preservation and used primarily for recreation and tourism purposes. In addition to the national parks are monuments and trails. Wyoming has a rich

resource within these lands for Wyomingites to enjoy and steward for many to benefit from these lands for time to come.

Stewardship

As Wyoming citizens, we are entrusted with the responsible development, care, and use of our resources to benefit current and future generations.





Lesson One: Mine or Ours?

Grade Level: 2nd Grade

Time: 20-30 minutes

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

Objective: Students will use visuals and identify ways to be stewards of a variety of places/things.

Purpose: Students learn the meaning of stewardship and how they can be a steward.

Required Materials/Resources:

- Poster/chart paper for definition of stewardship
- Picture Cards - (At least two cards per pair of students and the teacher will need a few cards for examples. For the student pairs, one card needs to be a private item: dog, house, shoes, farm, etc.; and the other card needs to be something public: wildflower field, park, lake, etc.) (These cards will be used again in Lesson 2.)
- Sentence Stems sheet (one per student)
- Sticky notes (one per student)

Suggested Teacher Preparation:

- Decide on student pairs for the activity.
- Choose Picture Cards that will be used as samples.
- Write "Sentence Stems" on the board.
- Decide how many Picture Cards pairs will receive. (These cards will be used again in Lesson 2.)

- Title a piece of poster/chart paper “WE ARE STEWARDS” to place the exit tickets on at the end of the lesson. This can be used throughout the unit.

Standards:

Social Studies: SS2.4.1 (Explicit)

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

CVE: CV5.1.4 (Practiced/Encountered)

Vocabulary:

- **Natural resources** - sources of life, materials, or energy that are found on the earth
- **Stewardship** - As Wyoming citizens, we are stewards entrusted with the responsible development, care, and use of our resources to benefit current and future generations.

Instructional Procedure/Steps:

1. Say: **“Today, we are starting a unit about being a steward of our land in Wyoming. Being a good steward means taking care of our things, places we visit, and our natural resources. Natural resources are sources of life, materials, or energy that are found on the earth and very important for humans. I used a natural resource today when I took a shower this morning. Can any of you think of a natural resource you’ve used today?”** Allow students to share a few examples: *trees, water, air, soil, plants, animals*. If they have trouble generating some, provide them with multiple examples.
2. Display one of the Picture Cards and discuss with the class that we have to be STEWARDS of the things we use and the places we visit including why it is important to be a steward. *Some examples include the following: If a picture of a park is displayed, the teacher might say, “I would be a steward of this park by keeping my dog on a leash, picking up my trash, and by reading the rules on how to*

TEACHER NOTE:

Time may vary depending on the number of cards each pair of students is given.

use the equipment. It's important for me to take care of this park and be a steward, so I have a fun place to play." If a picture of shoes is displayed, the teacher might say, ***"I am a steward of my shoes by putting them in my closet when I'm not wearing them, not putting knots in the shoelaces, and putting them on all the way, so I don't ruin the backs of the shoes. My shoes cost money, and it important for me to be a steward of them so they will last."***

3. Say: **"There is a reason we are stewards. Everything we do has a consequence. Can you think of what would happen to our items if we are not stewards of them?"** Allow students to respond. Again, if they are having a difficult time, provide examples. *For example, if a picture of a park is displayed, the teacher might say, "If we are not stewards of this park, the playground equipment could be broken, there could be trash everywhere, and it would not be a fun place to play."* Encourage students to share how things could change in the future if we are not stewards.

4.  Pass out and review the Sentence Stems sheets. Place students into pairs and give each pair at least two cards. (Give pairs as many cards as you wish.) Students have five minutes to study their Picture Cards. Have pairs discuss their Picture Cards and complete their Sentence Stems sheet. Each student should use a different card for his/her own Sentence Stem sheet. Students should be prepared to share their responses with the class. Monitor student discussions, and if students need help, ask them the following scaffolding questions to have them recognize how we take care of the places/things and why it is important to do so. **"What would happen if we didn't have this place/object?"**



In this task, students will be engaged in the higher order thinking skill of application.

How do we need to take care of this place/object, so it isn't ruined?"

- We can be stewards of this (object or place) by (how do we take care of it).
- We need to be stewards of this because _____.
- If I am not a steward of _____ then _____. *For example: If I am not a steward of the park, then we would not have a fun place to play.*
- Give an example of a situation where stewardship is important_____.

5. When students have finished discussing and completing their sheets, have pairs make a group of four to share their Sentence Stem responses. Choose a few pairs to share their responses with the whole class. After all pairs have shared, say: **"Remember, good stewardship means taking care of things that matter to us, our family, and our community for the future. In our next lesson, we will learn about the difference between private and public land and how we can be stewards of Wyoming land."**

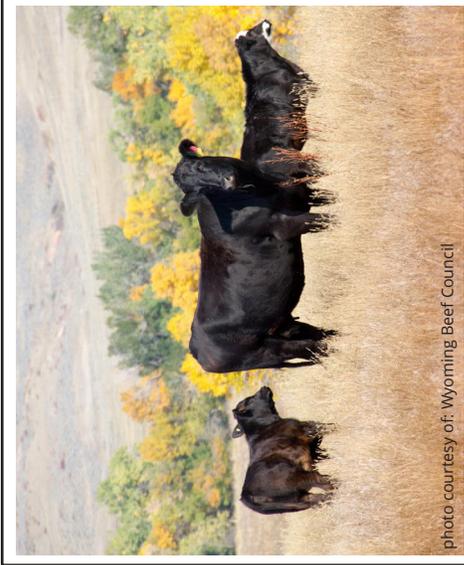
Assessment: Give each student a sticky note to use as an exit ticket. Say: **"On your sticky note, write or draw one way you can be a steward."** Have the students share their responses with their partner and have them place their sticky notes on the WE ARE STEWARDS poster/chart. Examine sticky notes to check that students did provide a correct way to be a steward. This poster with exit tickets will begin the next lesson.

Credits/Sources: Photo credits are cited on the Picture Cards.

Picture Cards



Blue Jeans



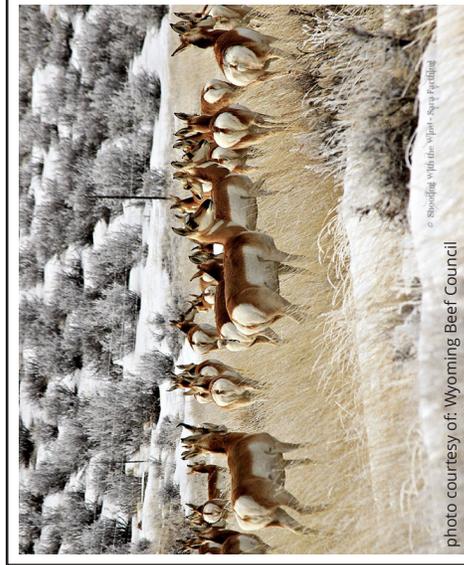
Cattle



Dog



Wild Iris



Pronghorn Herd

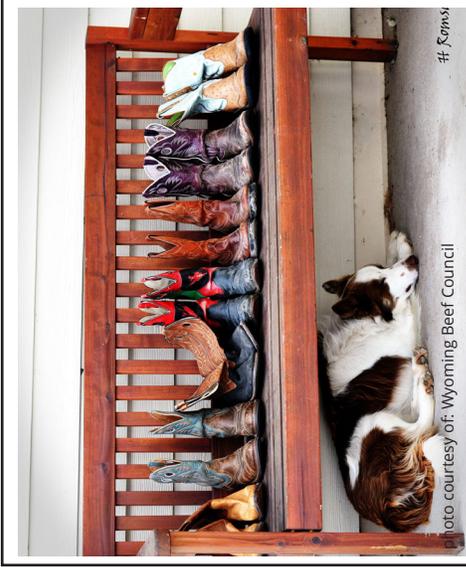


Western Meadowlark

Picture Cards



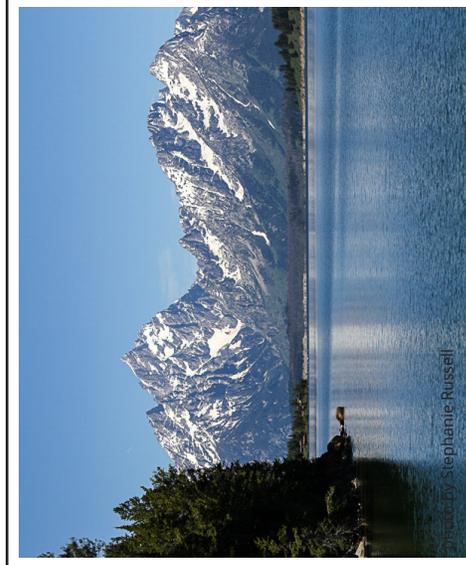
Farm Equipment



Cowboy Boots



Mountain Bike



Tetons



Yellowstone Falls



South Pass State Park

Picture Cards



photo courtesy of: Wyoming State Parks

Boat and Water Skis



Pickup and Horse Trailer



Corn Field and Pivot



photo courtesy of: Wyoming State Parks

Osprey

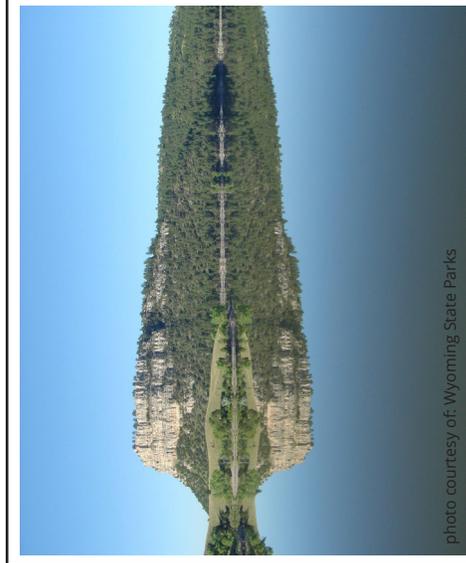


photo courtesy of: Wyoming State Parks

Guernsey State Park



photo courtesy of: Wyoming State Parks

Hot Springs State Park

Sentence Stems

Lesson 1

Name: _____

1. We can be stewards of this _____

by _____.

2. We need to be stewards of this because _____

_____.

3. If I am not a steward of _____,

then _____.

4. Give an example of a situation where stewardship is important. _____

_____.



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Sentence Stems

Lesson 1

1. We can be stewards of this _____

by _____.

2. We need to be stewards of this because _____

_____.

3. If I am not a steward of _____,

then _____.

4. Give an example of a situation where stewardship is important. _____

_____.



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Lesson Two: What is Public? What is Private?

Grade Level: 2nd Grade

Time: 45-60 minutes

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

Objectives: Students will:

- Determine the difference between the terms public and private.
- Use a map of Wyoming to identify public and private lands.

Purpose: Students learn that Wyoming has both public and private lands.

Required Materials/Resources:

- WE ARE STEWARDS poster with exit tickets from previous lesson.
- Specific Picture Cards from Lesson 1: Yellowstone Falls, cowboy boots, cornfield and pivot, pronghorn herd, dog, and Tetons.
- Three additional private Picture Cards and three additional public land Picture Cards (chosen from Lesson 1). You will reference South Pass State Park, Guernsey State Park, and Hot Springs State Park at the end of the lesson, but they can be some of your choices.
- Chart paper
- Tape and/or glue

- Wyoming Land Ownership Map (one per student) - (Source 1)
- Wyoming Land Ownership Map Answer Key (one for the teacher)
- Student Journals OR notebook or printer paper to make Student Journal pages (one per student)

TEACHER NOTE:

Wyoming also contains lands known as State Trust Lands. These are lands granted to Wyoming and designated to generate revenue for public schools and other state institutions. While they are owned by the State, public access is limited depending on location and designated use. To avoid confusion, we have limited the definition of public lands in this unit to focus only on federal lands and state parks.

Suggested Teacher Preparation:

- Prepare the T-chart poster. Label one side PUBLIC and the other side PRIVATE. (See Land Ownership in Wyoming organizer)
- Choose three additional Public Picture Cards and three additional Private Picture Cards from remaining Picture Cards.
- Designate an area of the room to be Public and an area to be Private.
- Identify your own local public land areas and where they are located on the Wyoming Land Ownership Map. (See step 7)
- Prepare Student Journal pages by leaving space to tape/glue the Wyoming Land Ownership Map and typing/writing the following sentence stems on notebook/printer paper OR write the following sentence stems in Student Journals:
 - I know _____ is public land because _____.
 - I know _____ is private land because _____.
 - Wyoming is unique because _____.
 - How will being a steward impact the future of our state’s public land?

Standards:

Social Studies: SS2.5.2 (Explicit), SS2.5.1 (Practiced/Encountered)

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

CVE: CV5.3.1, CV5.4.4 (Practiced/Encountered)

Vocabulary:

- **Private land** - land owned by a person or group and kept for their exclusive use; permission and access for any purpose must be granted by the owner
- **Public land** - land owned by a government; may or may not be accessible to the public

Instructional Procedure/Steps:

1. Discuss with students their exit tickets on the “WE ARE STEWARDS” poster from the previous lesson. Focus the discussion on students using the word STEWARD and how they can be stewards.
2. Say: **“In the previous lesson, we looked at pictures of opportunities for stewardship and discussed how we can be stewards in each. Today, we are going to discuss how the stewardship of places and things can change depending on if the place or item is public or private.”** Display the T-Chart you created.
3. Begin a discussion using the following Picture Cards from lesson one: Yellowstone Falls, cowboy boots, cornfield and pivot, pronghorn herd, dog, and Tetons. Display and discuss the cards one at a time, so students understand if these places/items are public or private. Have the students name if the place or item is public or private. Once the class decides, tape the picture on the T-chart under the appropriate heading. Continue this discussion with all six cards.

*For example, say: “**Yellowstone Falls, in Yellowstone National Park, are PUBLIC because they can be seen and used by everyone. Anyone who visits needs to be a steward of this national park and make sure to keep it clean, follow the rules so kids are safe, etc. A corn field and pivot are PRIVATE because they only get to be used by the owner, and the owner would be the steward over that farm. The owner would be the one responsible for***

TEACHER NOTE:
We recommend using actions to represent PRIVATE and PUBLIC. When you say PUBLIC, open your arms wide. When you say PRIVATE, cross your arms over your chest.

watering the crops, picking up garbage, maintenance of equipment, etc.”

4. Say: **“Now, we will practice determining if places or items are public or private. This area of the room is public. This area of the room is private. I will show more of our Picture Cards. If the picture is a public place or thing, go to the public area. If it is a private place or thing, go to the private area. After I hold up the Picture Card, I will tell you when to go.”** Hold up the first Picture Card, and have students move to their chosen areas. Once all students have chosen a space, say: **“Discuss with someone nearby why you chose either public or private and how you determined whether the picture was showing a public or private place or item.”** Call on different students to share reasons why they chose public/private. Check that students are in the accurate spaces and clear up any misconceptions before moving on to the next picture. Have students reconvene in the center before the next picture is presented. Complete the same process with the five other additional Picture Cards.

5. After completing all of the additional Picture Cards, ask: **“What do we now know about public and private lands?”** Allow students to share their ideas. Ask: **“Why do we need to be good stewards of public and private lands?”** *So, we can use them now as well as leave them for future generations.* Using the images students have just seen, knowledge about local surroundings in your community, and student background knowledge, have the class list characteristics of public lands and private lands. Write them on the T-chart to use as a resource throughout this unit. *PUBLIC LAND is land that is used for many different purposes. We can all use the land, and we are all responsible for the stewardship of the land. PRIVATE LAND is land that is owned by a person or group that we cannot use without their permission. The owner is*

responsible for caring for his or her own land.

6.  Display the Wyoming Land Ownership Map and pass out student copies. Say: **“Look at the map, and share with a neighbor what you see.”** *Students should notice that the map shows colors representing different types of land. Ask: “Wyoming is made of public and private lands. What do you notice when you look at this map of public and private land in Wyoming?”* Allow students to discuss. Make sure that students mention the following: *Wyoming is unique because more than half of our state is public land.*

7.  Revisit the definitions of public/private land from T-chart. Identify areas that are public and areas that are private. Hold up or point to the Picture Cards from lesson one with public lands depicted on them: Tetons, Yellowstone Falls, South Pass State Park, Guernsey State Park, and Hot Springs State Park. Say: **“All of these public lands are located in our state.”** Ask: **“How can we be stewards of these areas so that they will be available for our use and other people’s use both now and in the future?”** Allow time for students to respond. Refer to other public lands in your area to help students make connections. Circle on the map where the public lands Picture Cards mentioned above are located and some other examples of public lands from your own local area. Some local examples are: *parks, monuments, grasslands, reservoirs, lakes, forests.* These will be studied more in depth in future lessons. Have students also circle the same areas on their own maps and tape or glue the map into their journals. Ask: **“We need to be stewards of our entire land, and this includes taking care of our public lands. How will being a steward impact the future of our state’s public land?”** *Because Wyoming has so much public land, we need to be stewards of it to help*



In this task, students will be engaged in the higher order thinking skill of analysis by recognizing trends and identifying and analyzing patterns.



In this task, students will be engaged in the higher order thinking skill of synthesis by imagining, inferring, and predicting.

TEACHER NOTE:
Google Earth is another resource to show different public and private lands in your area.

ensure that it is available for future generations.

Assessment: Pass out Student Journal pages, and have students complete the following four sentence stems:

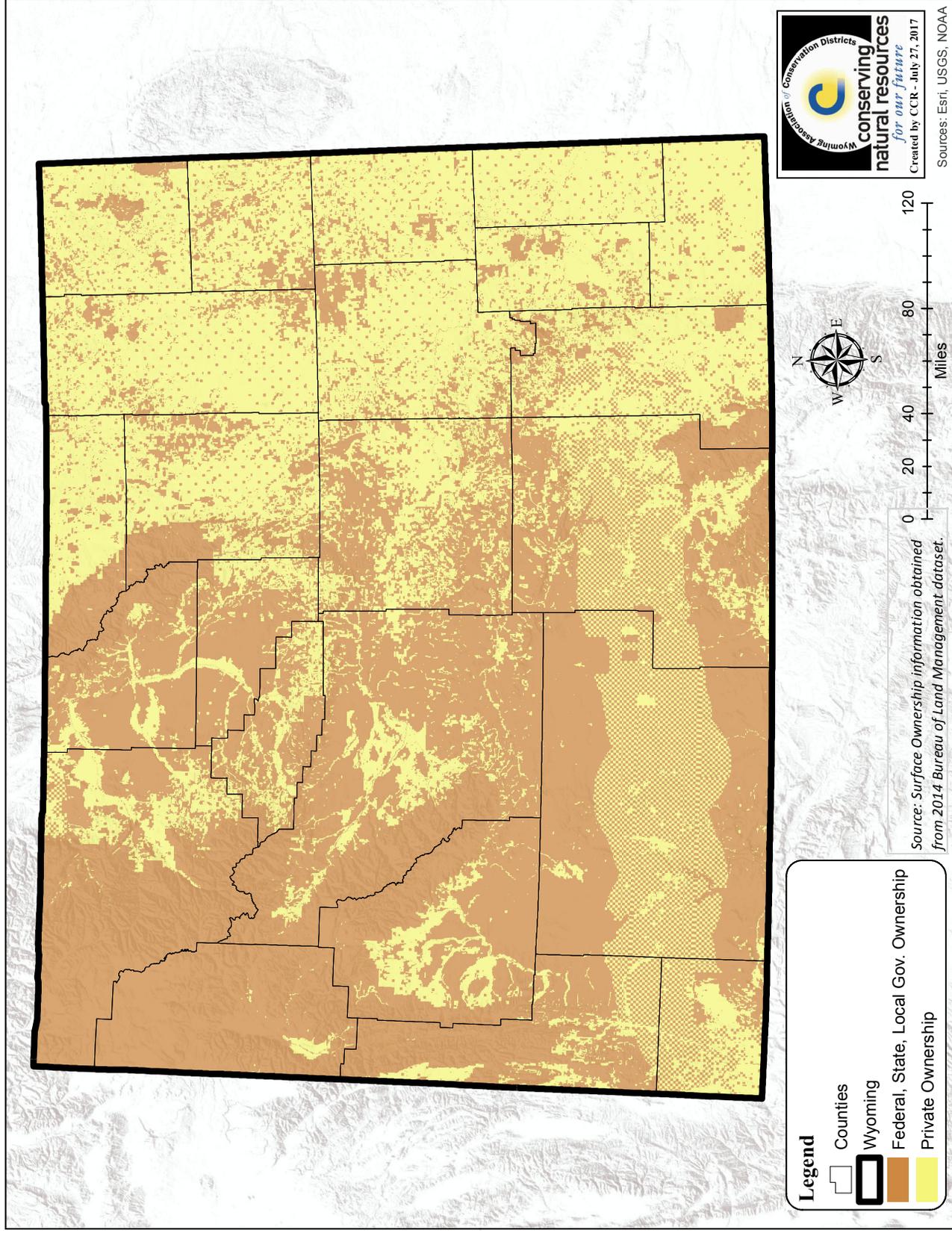
- I know _____ is public land because _____.
- I know _____ is private land because _____.
- Wyoming is unique because _____.
- How will being a steward impact the future of our state's public land?

Check student responses to make sure they understand the difference between public and private land and the importance of being a steward. Students can use the journal pages to track how their thinking changes as they continue through the Outdoor Recreation and Tourism unit.

Credits/Sources:

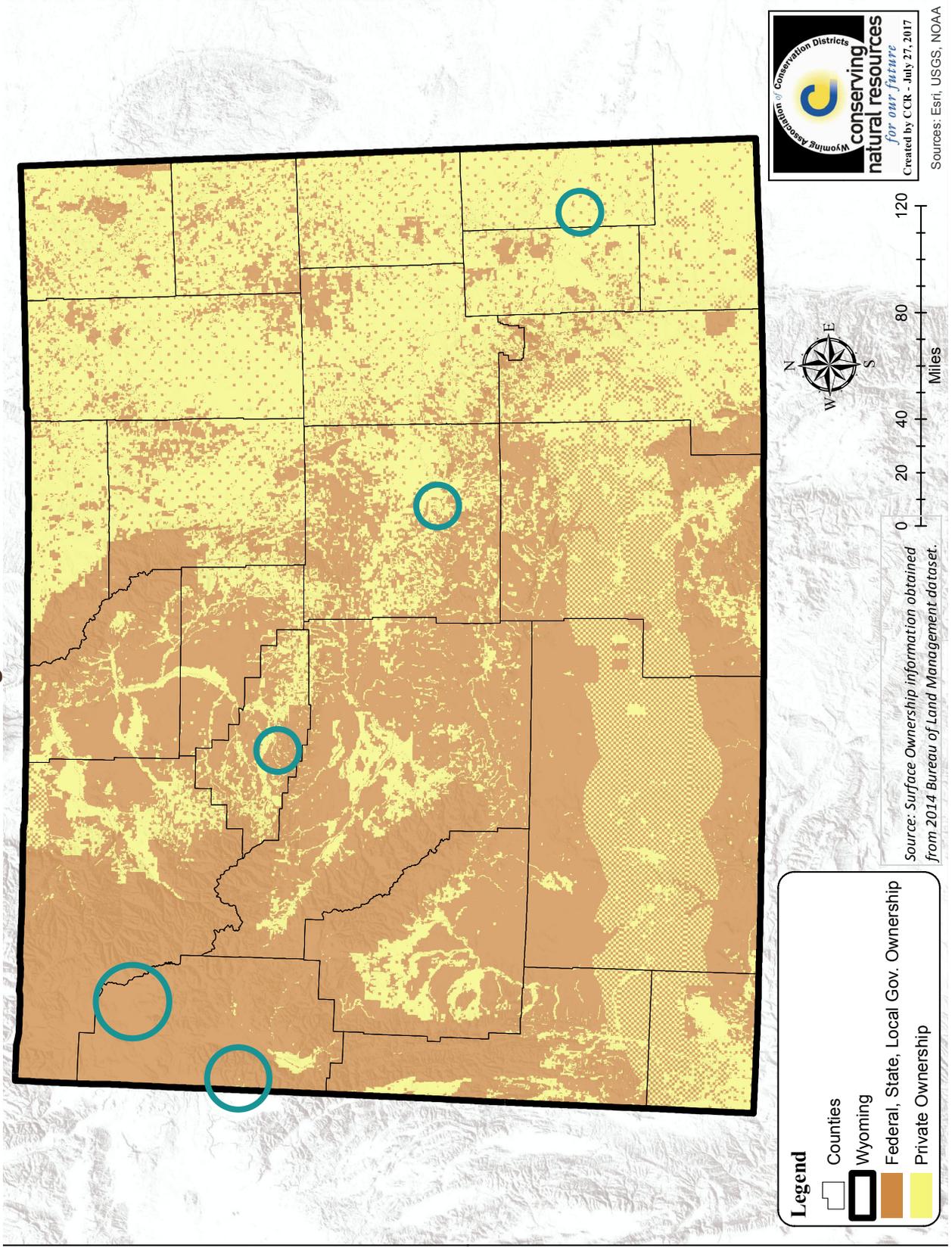
1. Wyoming Association of Conservation Districts. (2017, July 27). *Wyoming Land Ownership Map*. Cheyenne, Wyoming.

Wyoming Land Ownership Map



Wyoming Land Ownership Map

Answer Key (locations are approximate)



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Land Ownership in Wyoming

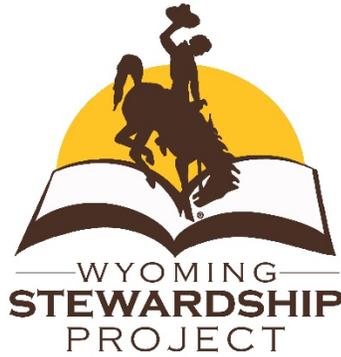
Public Land

- land owned by a government; may or may not be accessible to the public

Private Land

- land owned by a person or group and kept for their exclusive use; permission and access for any purpose must be granted by the owner





Lesson Three: Wyoming – Land of Many Uses

Grade Level: 2nd Grade

Time: 45 minutes

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

Objective: Students will identify different uses of public and private land by discussing scenarios and observing pictures.

Purpose: Students learn that Wyoming land has multiple uses.

Required Materials/Resources:

- Terrain Type Photos (one per small group - make duplicate copies of pictures if needed for larger classes) These will be used again in other lessons. *Specific information for the attached photos: the mountains are Grand Teton National Park; the water picture is Guernsey State Park; the grassland is Thunder Basin National Grassland; and the forest is Casper Mountain.*
- Student Journals OR notebook or printer paper to make Student Journal pages (one per student)
- Drawing paper (optional - one per student. Students can do this in their journal instead of on separate paper if you choose.)

Suggested Teacher Preparation:

- Assign students to small groups.
- 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 thing to do outside is**

_____.

- **Wyoming is unique because**

_____.

Standards:

Social Studies: SS2.5.2 (Explicit)

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

CVE: CV5.4.1 (Practiced/Encountered)

Vocabulary:

- **Forest** - a large area of land covered with trees and underbrush
- **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
- **Recreation** - an activity that is undertaken for pleasure or relaxation
- **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)
- **Scenery** - the view of natural features that are pleasing to look at
- **Terrain** - the physical features of an area of land

Instructional Procedure/Steps:

1. To begin this lesson, the class will play the game Have You Ever? (Source 2). This game will review stewardship and the difference between public lands and private lands as well as introduce how we use public lands. Arrange students in a circle. Say: **“To play this game, I will ask if you have ever done some different activities. If you have done the activity, stay standing. If you have never done the activity, sit**

TEACHER NOTE:

Have students use the actions mentioned in lesson two to show if the place is private or public before you discuss.

Discussion: Think-pair-share is a strategy for students to share with a partner, so everyone has equal participation.

down. Let's practice with some examples: If I asked have you ever been to school, we would all stay STANDING because we have all been to school. If I asked have you ever seen a live dinosaur, we would all SIT because none of us have seen a real live dinosaur. Questions?" After students respond to a question, discuss how each question relates to public/private lands and stewardship before moving on to the next one. Play the game.

- Ask: **"Have you ever gone down a slide at a park?"** Discussion point: *Parks are public land that often have slides for all of us to enjoy. Why do we need to be stewards of our parks?*
- Ask: **"Have you ever gone camping?"** Discussion point: *Campgrounds can be on public or private lands. How have you shown stewardship while camping?*
- Ask: **"Have you ever built a fort in your living room?"** Discussion point: *This is using private land. Your neighbor could not come into your home and use your fort without your permission. If you're not a steward of your living room, could you enjoy building forts?*
- Ask: **"Have you ever ridden an escalator to the tenth floor of a store?"** Discussion point: *In Wyoming, the stores are usually not built to the tenth floor. Perhaps there is an elevator but not an escalator. There are rules to follow when riding an escalator. How can you be a steward while visiting these places?*
- Ask: **"Have you ever gone fishing?"** Discussion point: *In Wyoming, we have many lakes, rivers, and reservoirs where we can all fish. There are rules you have to follow on both public and private land when fishing. If we're not following these rules, we are not being stewards.*

- Ask: **“Have you ever ridden on a gondola at a ski resort?”** Discussion point: *In Wyoming, there is only one public location with a gondola. Unless you have gone skiing in Jackson Hole, you may or may not have done this activity in our state. How can you be a steward of public places you may visit as a tourist?*
 - Ask: **“Have you ever run through a sprinkler in your yard?”** Discussion point: *This is using private land. Friends would have to ask permission to run through your sprinkler. How could you be a steward of your backyard, so you can enjoy running through the sprinkler? How can you be a steward of water?*
2. Say: **“We just talked about some activities people enjoy in Wyoming ... to fish, camp, and play. Now we are going to learn even more ways we use the land.”** Divide students into groups. Give each small group one Terrain Type photo and pass out their Student Journals or a piece of notebook paper for students’ journals. Have students respond to the following prompt: **“What are some uses or things you can do on this land?”** Have students make a list in their own journals. In their groups, give students five minutes to take turns sharing what uses/activities they brainstormed. After the five minutes are up, have groups share their pictures and uses of the land with the whole class.
3. Say: **“Wyoming has different types of terrain located within our state. It allows us to do many fun things in our state, and many tourists come here from other places to enjoy the scenery and recreation opportunities. In our next lesson, we will be learning more about Wyoming’s terrain.”** Close by reviewing the different types of terrain and ways we use the land in Wyoming. Say: **“We are so lucky to live in a state where we can go outside and enjoy so many different activities!”**

Take a minute and think about which of these activities you enjoy. Have students generate a picture of terrain either in their journals or on separate pieces of printer paper if you'd like to display them. When students are finished making their pictures, have students switch pictures with a partner and discuss what activities could occur on that terrain and how stewardship could impact those activities.

Assessment: As an assessment/check for understanding, have students either write and/or draw in their journal a response to the following prompts:

My favorite thing to do outside is

_____.

Wyoming is unique because

_____.

Review responses to ensure that students are answering correctly.

Credits/Sources:

1. Reading Rocket: WETA. (2018). *Think-Pair-Share*. Retrieved August 22, 2018, from <http://www.readingrockets.org/strategies/think-pair-share>
2. Neill, James. (2005, December 8). *Have You Ever?* Retrieved August 22, 2018, from <http://www.wilderdom.com/games/descriptions/HaveYouEver.html>
3. Photo credits are cited on the Terrain Type photos.

Terrain Type Photos

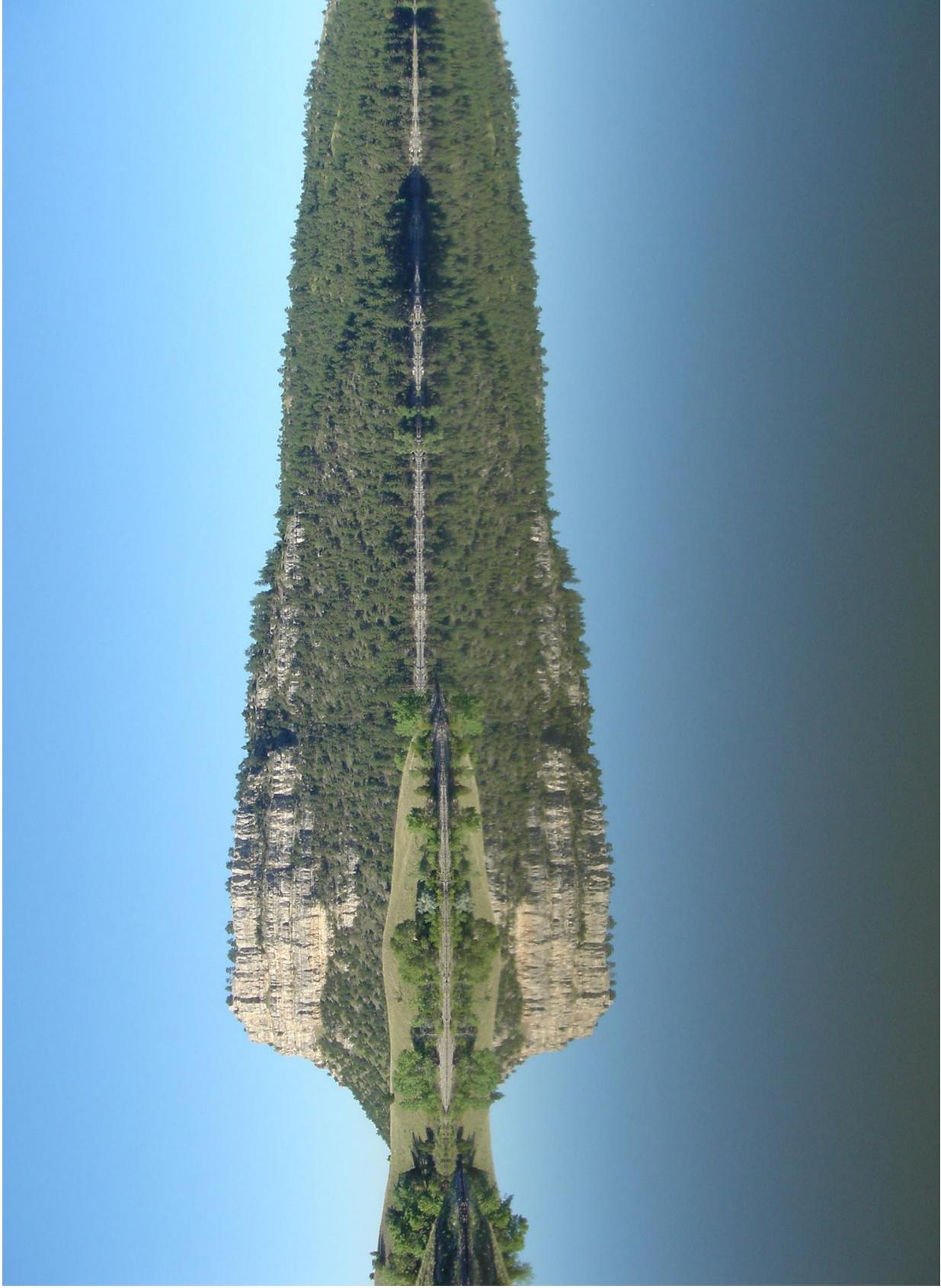


Photo Credit: Wyoming State Parks

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Terrain Type Photos



Photo Credit: Janet Wragge
© 2017 Wyoming Agriculture in the Classroom Materials

Terrain Type Photos



Photo Credit: Stephanie Russell

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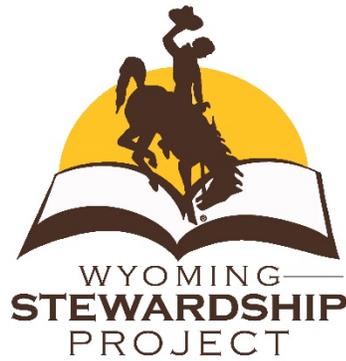
Terrain Type Photos



Photo Credit: TravelWyoming

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Lesson Four: Mapping in 3-D

Grade Level: 2nd Grade

Time: 2 days: 30 min for Day 1: 30-45 minutes for Day 2

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

Objectives: Students will:

- Learn how models are used in science.
- Create a model to represent different types of terrain.

Purpose: Students develop a model to understand that Wyoming's terrain makes the state unique.

Required Materials/Resources:

- Terrain Type photos from Lesson 3 (1 set for the class)
- 4 pieces of chart paper
- Tape
- Markers
- Physical Map of Wyoming - (one per student and one for the teacher)
- Student Journals OR notebook or printer paper to make Student Journal pages (one per student)
- Playdough/clay/salt dough (A small amount per student for Day 2: Step 2. For Day 2: Step 4, each small group will need enough to model the terrain on their blank Wyoming map. Since the clay/dough choice might slide off the paper easily, cookie sheets would be helpful to hold the materials.)
- Cardboard sheets to build the models on if teacher wants to keep clay/dough models

- Blank Physical Map of Wyoming - either laminated for students to put the dough on directly or for 2D sketching - (one per small group)

TEACHER NOTE:
Salt Dough Recipe

You will need:

- 1 cup salt
- 2 cups flour
- $\frac{3}{4}$ cup water

Instructions:

1. In a large bowl, mix salt and flour together.
2. Gradually stir in water. Mix well until it forms a doughy consistency.
3. Turn the dough onto a table or counter and knead with your hands until smooth and combined.
4. Make your creations using the salt dough.
5. If you would like these to go home or keep them for a future project, place the salt dough creations into the oven at 325°F. The amount of time needed to bake depends on the size and thickness of the salt dough creations. (Source 3)

Suggested Teacher Preparation:

- Become familiar with the four different types of terrain described throughout the lesson.
- Attach the Terrain Type Photos to the chart paper for Day 1: step 2.
- Find your town's location on the Physical Map of Wyoming.
- Decide whether on Day 2 students will sketch 2D maps or make 3D maps, and prepare your supplies accordingly including laminating the Blank Physical Map of Wyoming for each small group (3D models).
- Make salt dough, if necessary.
- Be able to explain the difference between 2D and 3D.
- Decide whether to keep 3D maps beyond the lesson. If they are being kept, prepare accordingly.
- Assign students to small groups.

Standards:

Science: 2-ESS2-2 (Explicit)

Social Studies: SS2.5.1, SS2.5.2 (Explicit)

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

CVE: CV5.1.4, CV5.3.1 (Practiced/Encountered)

Vocabulary:

- **Forest** - a large area of land covered with trees and underbrush
- **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:

Day 1:

1. Say: **"In our last lesson, we started talking about different terrains. Terrain means the physical features of an area of land. We discussed four types of terrain yesterday: mountains, water, forests, and grassland. In today's lesson, we will explore the characteristics of different types of terrain of Wyoming and build our own scientific models to show these different types of terrain."**
2. Display the four Terrain Type photos with a piece of chart paper attached underneath in different areas of the classroom. Provide each student with a writing utensil (preferably colored markers), and direct students to walk around the room and write what they notice about each type of terrain. Once students have visited all four pictures, discuss as a whole group what the students wrote on each chart. Address any misconceptions. *Students may think that forests and mountains are synonymous.* Use the descriptions below to guide your discussion about the characteristics of each type of terrain.
 - *Mountains (Source 1): They usually have steep, sloping sides and sharp or rounded ridges, and a high point, called a peak. Most geologists classify a mountain as a landform that rises at least 1,000 feet (300 meters) or more above its surrounding area. A mountain range is a series or chain of mountains that are close together. Animals that make their homes in mountains include the following: bears, mountain lions, deer, elk, Bighorn*

sheep, bobcat, chipmunks, and raccoons.

- *Grassland (Source 2): Grassland are land areas that are made mostly of grasses. They do not receive enough rainfall to grow trees like a forest, but they contain lots of grass so they receive more rain than a desert. Grasslands are often used for grazing and farms. Some wildlife that are found in grasslands include the following: pronghorn, prairie dogs, fox, coyotes, rabbits, bison.*
- *Forests: They are areas of land that have a large number of trees, bushes, and other foliage (wildflowers and ground cover) and provide habitat/homes to a wide variety of wildlife. They are often found in mountain areas. Some examples of wildlife that are found in forests include the following: deer, fox, raccoons, elk, woodpeckers, wolves, bears, skunks, woodchucks.*
- *Lakes, Rivers, and Reservoirs: Lakes are large bodies of standing or not moving water that are completely surrounded by land. Rivers are flowing bodies of freshwater that are bigger than creeks and streams. Reservoirs can be natural or man-made and are similar to lakes, but they have dams to control the release of the water to be used in different ways (irrigation, community water needs, etc.) The following are examples that can be found in water areas: fish, turtles, insects, otters, beavers, ducks and other waterfowl, frogs.*

3. Display the Physical Map of Wyoming to the whole class.
Say: **“Different maps show us different information about places. This Wyoming map shows us many different features of Wyoming. In order to understand this map, we need to look at the map key that tells us what each symbol means.”** Give each student a copy of the map and their Student Journals or a

piece of notebook/printer paper for students' journals. Guide them in labeling your town location on the map. Ask: **"What symbols do you see in our area?"** Guide the students to use the map key to discuss the features located close to where they live. When finished, have students put their maps in their journals for the next part of the lesson.

Day 2:

1. Pass out Student Journals, and have students refer back to their Physical Maps of Wyoming to review the previous day's concepts. Ask: **"What symbols do you see on the map? What terrain do you notice on your map?"** Refer to map key for symbols: mountains, water, forests, grassland.

2.  Display a copy of the Physical Map of Wyoming. Say: **"Now that we know the different types of terrain and how to read and use a map, we will create our own scientific model to show Wyoming's unique terrain. Scientists make models to represent many different things. We often can't experience things directly, so a model is a great way to conduct an experiment or work to solve a problem."** Ask: **"What kinds of things could we represent using a model?"** Allow students to respond. Possible responses: *the solar system, a dinosaur, an erupting volcano, jungle/zoo animals, a playground, etc.* Say: **"We are going to use modeling to show the different types of terrain that we could find in Wyoming."**

Pass out a small amount of clay/dough to each student. Say: **"Think about how you could use the clay/dough to model a tall mountain. Once you have an idea, go ahead and create it."** Give students a few minutes to make their model. Once finished, have students share their mountain models with a partner or small table group. Discuss as a whole class the following questions:

TEACHER NOTE:
Day 2 of this lesson calls for students to create a 3D map of Wyoming's terrain using clay/salt dough. If time does not allow for the creation of this type of model, students should sketch a 2D map as an alternative. In order to emphasize the Science and Engineering Practices embedded in the science standard, there will still need to be some discussion of how the 2D model is being created and what is being represented on it.

 In this task, students will be engaged in the higher order thinking skills of application and analysis by manipulating, designing, experimenting, identifying patterns, analyzing patterns, and recognizing trends in terrain.

“How are your models similar and different? How do they provide an accurate representation of a mountain? Why are they tall instead of flat?” Allow students to respond. Repeat this same process by asking the students to make a model for each of the three other types of terrain: a body of water, a forest, and a grassland. Discuss each using the first two questions. *In order to emphasize the Science and Engineering Practice “Developing and Using Models,” it is important during the activity that the teacher is pointing out how students are modeling different features of the terrain.* After students have made all four models, ask: **“How are our 3D models like the actual terrain we are learning about?”** Allow students to respond. *They have the same shape. They suggest the same texture. They provide a visual to allow us to see the terrains’ shapes.*

TEACHER NOTE:
For step 4, it may be easier to assign each member of the group a “corner” of the state to make with their clay/dough. When everyone is finished, the group can then join their pieces together. If time and materials allow, students could each make their own map.

3. Explain the difference between 3D and 2D. Say: **“On the 2D maps, the terrain features were modeled using symbols. 3D maps model the terrain differently.”** Refer back to the displayed Physical Map of Wyoming. Ask: **“Why are models useful?”** Possible responses: *They could see if a mountain range is tall enough to build a ski area, if a river could flood and affect homes, decide if an area is good for farming.*

Assessment:



In this task, students will be engaged in the higher order thinking skill of application by designing their models.

4.  Have students refer back to their Physical Map of Wyoming. Place students into small groups. Pass out a laminated blank map of Wyoming to each group and enough additional clay/dough to model the terrain on the blank map. Ask: **“How could you use your clay/dough to represent the terrain of Wyoming on this map?”** Allow students to respond. Have students work in their groups and use their dough to make a model of the terrain in Wyoming.

5. When all groups are finished making their models, collect them for assessment purposes. *The completed models should illustrate the different terrain in the different, correct areas.* Reconvene the whole group and discuss the following questions:

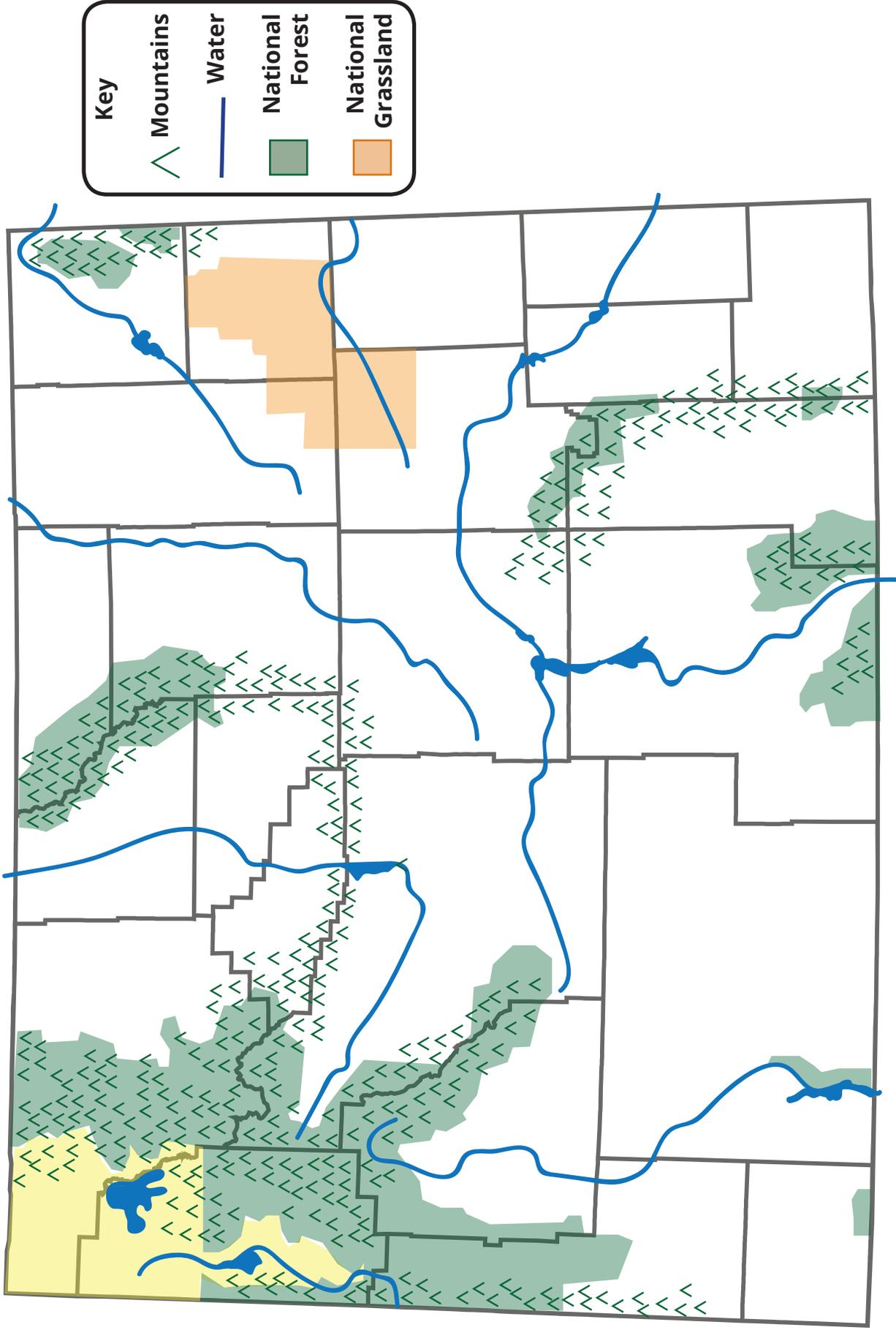
- **“What do you notice about our terrain?”**
- **“What kinds of terrain do you see?”**
- **“What would happen if we did not have mountains? Bodies of water? Forests? Grasslands?”**
- **“Who would be affected?”**
- **“What will happen to future generations if we did not take care of our terrain?”**
- **“Would others want to come visit our state without our unique terrain?”**

6. For closure, say: **“Such a variety of terrain is not present in every state in our country. Wyoming is unique because of all of the different terrain it has. This allows Wyoming to offer many different things to do in our state. That makes us even more responsible to be stewards of our land. Without our unique, different types of terrain, Wyoming would not be able to offer all of our activities and uses. We’ll explore those ideas more in our next lesson.”**

Credits/Sources:

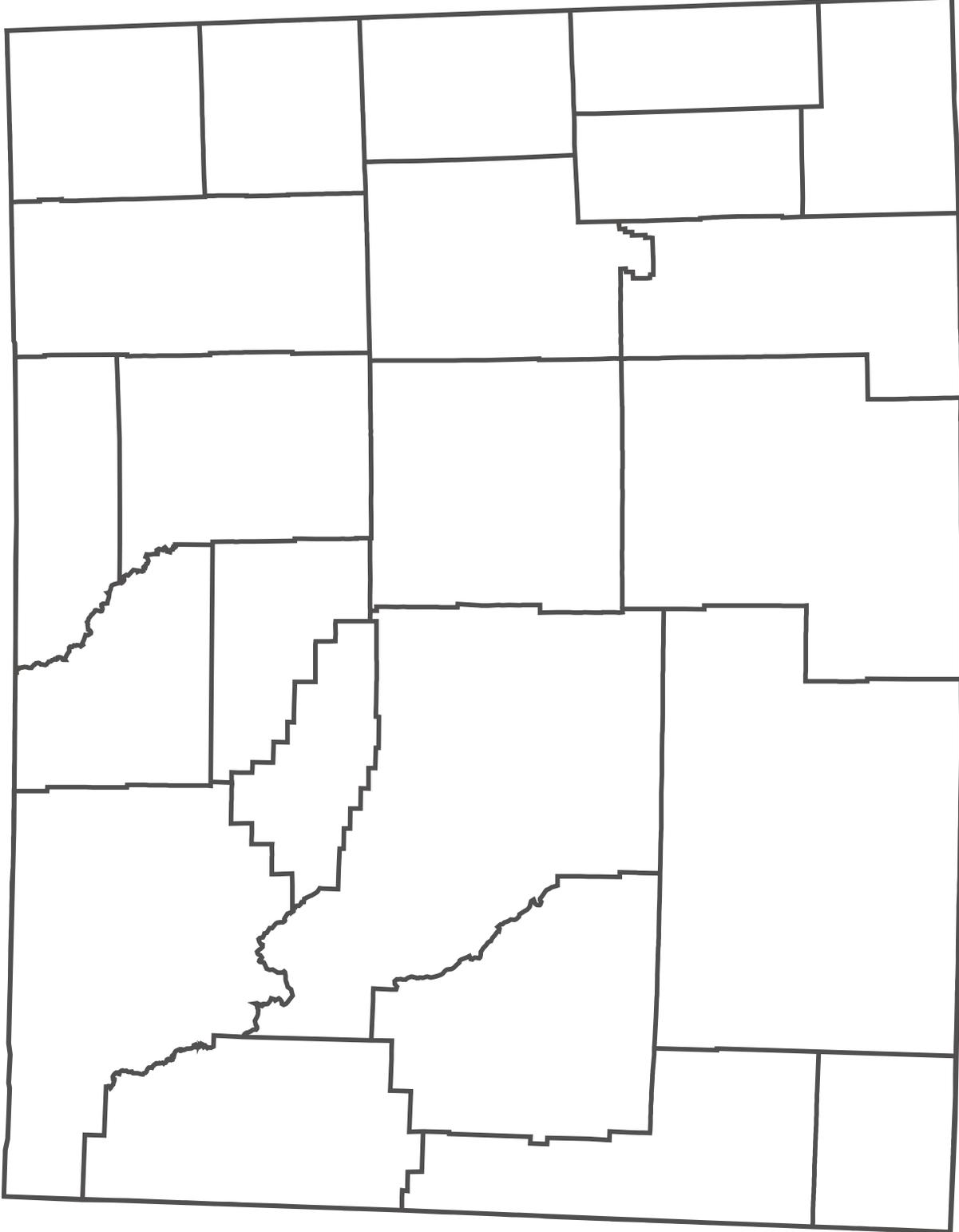
1. National Geographic Society. (1996-2017). *Mountains*. Retrieved August 8, 2017, from <http://www.nationalgeographic.com/science/earth/surface-of-the-earth/mountains/>
2. Softschools.com. (2005-2017). *Grassland Biome Facts*. Retrieved August 8, 2017, from http://www.softschools.com/facts/biomes/grassland_biome_facts/165/
3. Davis, Janice. Learning4Kids. (2012, December 9). *How To Make Salt Dough Recipe?* Retrieved August 23, 2018, from <https://www.learning4kids.net/2012/12/09/how-to-make-salt-dough-recipe/>

Physical Map of Wyoming

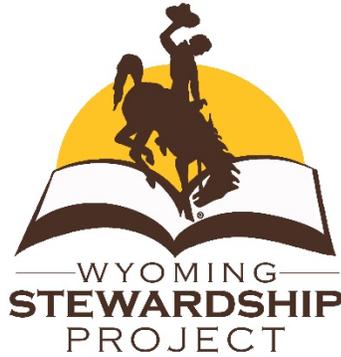


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Physical Map of Wyoming



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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:
<http://www.eyexpo.com/vr/YellowstoneNationalPark/>
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.

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.*

TEACHER NOTE:

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

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**

_____ to be a steward of that land. Say:
“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 people may enjoy it now and in*

years to come. When finished with the game, have students return to their seats and write in their journals one way they can be a steward 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 check that responses support the definition of stewardship.

Credits/Sources:

1. National Geographic Society. (1996-2017). *Mountains*. Retrieved August 8, 2017, from <http://www.nationalgeographic.com/science/earth/surface-of-the-earth/mountains/>
2. 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-I-need-to-Hunt>

Terrain Type!

Story 1

Susie passed her hunter's safety test, and she was so excited for her first hunting trip with her dad. She had her new orange vest packed but wasn't sure what else she would need. Her dad told her not to worry about packing her raincoat because it was unlikely to rain while they were there. However, he told her not to forget the sunscreen because there would not be trees for shade. Susie also packed long pants because they would be doing a lot of walking through tall grass. Before they left, Susie and her dad looked carefully at a map to make sure they knew where they could hunt. Susie and her dad left for the big trip before the sun came up. When they arrived, Susie's dad realized he forgot his hunting license, but Susie had hers. They walked miles searching for the perfect buck. They didn't see anything, but her dad told her hunters have to be patient, and they would try again tomorrow.

Terrain Type: Grassland (Source 2)

Good Stewardship Examples: Susie has her hunter's safety card. They both wore orange vests. They reviewed the area where they would hunt.

Poor Stewardship Examples: Susie's dad is hunting without his license.

Story 2

Ben and Casey had been best friends since Kindergarten. They both loved the outdoors and often went exploring together. One sunny, August day, the boys set out to hopefully get their biggest catch of the summer. Casey had cast only once when he yelled downstream to Ben, "HELP! HELP!" Frightened, Ben dropped his pole and ran towards Casey. Casey was struggling to hold on to his fishing pole as he tried to reel in his big catch. Ben grabbed his pole and helped Casey hold tight. After a few minutes, the boys realized they just caught a fish bigger than ever before. They quickly took a picture and carefully returned the fish back to the water. Because even though it was their biggest catch, the boys were unsure if it was big enough to keep. The boys packed up their things, decided to leave their lunch scraps for the wildlife, and skipped on home.

Terrain Type: Body of Water

Good Stewardship Examples: The boys carefully returned the fish to the water because they weren't sure of the rules on keeping the fish, and the boys picked up all of their belongings.

Poor Stewardship Examples: The boys left food scraps.



Terrain Type!

Story 3

Marissa was nervous but ready for her first ski trip. She was in awe as they drove. Everything was white and covered in snow. When they arrived at the slopes, her mom paid the entrance fee, and they were ready for the day of fun. There were many people in their snow gear, helmets, snow suits, and winter boots. Most people there made sure to be respectful of one another and followed the rules of the ski resort. Even though skiing was challenging, Marissa was enjoying the scenery as she skied. She especially liked when she rode the tram and was able to see the entire area from high above. While she was skiing, she noticed that there seemed to be a short-cut through the trees. She was getting tired and wanted to take a break. She ignored the "Private Property: Keep Out" sign and took the shortcut to the lodge. It was a fun day, and Marissa slept the whole way home back to her hometown.

Terrain Type: Mountain (Source 1)

Good Stewardship Examples: Marissa's mom paid the entrance fee, and most people followed the rules.

Poor Stewardship Examples: Marissa ignored a posted sign and decided to take a shortcut through private land when she got tired.

Story 4

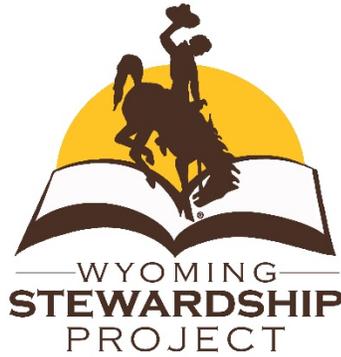
Connor had never seen so many trees before. The aspen and pine trees were beautiful shades of green and swaying ever so gently in the wind. Connor and his brother were going on a hike and were hoping to see some birds with their new binoculars. Connor wondered how many different animals were hiding in those thick groups of trees. Connor had gotten a new pocket knife and carved his name in one of the trees. He saw many trees, rabbits and a fox, and he heard an elk bugling in the distance. Half way through their trip, they even saw a great horned owl! He was so excited to see it spread its wings and make its beautiful sounds. He would remember that moment for a long time. Connor and his brother stopped to have a picnic. They brought sandwiches, water and fruit. When they were done, Connor's brother reminded him to pack up their trash in a bag they had brought. Connor and his brother headed home very happy and were going to tell their parents about everything they had seen.

Terrain Type: Forest

Good Stewardship Example: Being respectful of the wildlife and packing up their trash.

Poor Stewardship Example: Carving name in tree.





Lesson Six: How to Be a Steward?

Grade Level: 2nd Grade

Time: This is a multiple step lesson that will require multiple days depending on the various components utilized by the teacher (i.e. guest speakers). Please read the lesson in its entirety prior to teaching. The lesson is segmented into days as a possible suggestion.

Day 1: Steps 1 & 2 - 30 minutes

Day 2: Step 3 - 30 minutes

Day 3: Steps 4 & 5 - 30 minutes

Day 4: Step 6 (Step 7 is optional) - 30 minutes

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

Objective: Students will identify what it takes to be a steward of Wyoming's private and public lands.

Purpose: Students learn how they can be a steward of Wyoming's lands and about professional jobs caring for Wyoming's lands.

Required Materials/Resources:

- Park Signs PowerPoint
- Printer paper (one piece per student)
- Gym, playground, or large space in your classroom for the Scenario game
- Crumpled up pieces of paper (at least two per student)

- Timer
- Tape or chalk
- Optional for *Scenario 3: Don't Feed the Animals*
 - Animal Cards (print single-sided)
 - Food Cards (print single-sided) (one or more for every student who is originally NOT in group A)
- Careers in Stewardship PowerPoint (Sources 4-7)
- Wyoming State Parks website
<http://wyoparks.state.wy.us/index.php/places-to-go/view-full-list-of-wyoming-state-parks> (Source 1)

TEACHER NOTE:

This lesson would be a great opportunity to take a field trip to a local park. Students could come up with ways to be a good steward of local areas or resources and see if there are any rules displayed that guide people to be good stewards.

Optional Resources:

- Fire Prevention How-tos:
<https://smokeybear.com/en/prevention-how-tos> (Source 2)
- Tread Lightly: <https://www.treadlightly.org/learn/> (Source 3)
- Play Clean Go <http://www.playcleango.org/> (Source 8)
- Wyoming Fishing and Boating
<https://wgfd.wyo.gov/Fishing-and-Boating/Aquatic-Invasive-Species-Prevention/Threats> (Source 9)
- Chart paper

Suggested Teacher Preparation:

- Decide where you want to do the Scenario Game, so students have space to move around.
- Review the scenarios for the Scenario Game to help plan student groupings.
- Prepare area and materials for the Scenario Game.
- Decide whether or not you will do Scenario 3 in the Scenario Game. If so, prepare the Animal and Food cards. Post the Animal cards around your room.
- Visit the Wyoming State Parks website and become familiar with navigating the site.
- Choose the parks from the Wyoming State Parks website that you wish to showcase.
- Decide whether you will share chosen state parks with the whole class, or have students navigate the Wyoming State Parks website on their own.
- Decide whether you want to do the optional activities in step 7.

Standards:

Social Studies: SS2.1.1, SS2.1.4 (Explicit), SS2.6.3
(Practiced/Encountered)

ELA: 2.W.8 (Practiced/Encountered)

CVE: CV5.1.1, CV5.3.1, CV5.4.4, CV5.5.1 (Practiced/Encountered)

Vocabulary:

- **Stewardship** - As Wyoming citizens, we are stewards entrusted with the responsible development, care, and use of our resources to benefit current and future generations.

Instructional Procedure/Steps:**Day 1:**

1. Say: **“Now that we have learned about how unique Wyoming is because of our different terrain and the multiple uses of it, we know we need to be stewards of Wyoming’s land.”** Ask: **“What can we do to be stewards of Wyoming’s land so that we can enjoy it now and other people can continue to enjoy it in the future?”** Allow students to respond. Say: **“Today, we will be talking about how one aspect of being a steward is to follow the rules and laws encountered when using Wyoming lands.”**
2. Have students brainstorm different ways to be stewards of Wyoming lands. Show the Park Signs PowerPoint. Say: **“These signs show the rules and laws that must be followed on public or private lands.”** After each one, ask: **“Why do you think these signs were posted?”** Use the information below to guide your discussion:
 - **Warning: Animals are Dangerous Never Approach or Feed** - *This keeps people and animals safe.*
 - **Camp in Designated Areas Only** - *This keeps wildlife and plant life safe, as well as people out of*

harm.

- **Stay on the Trail** - Keeps people away from danger and preserves nature.
- **No Littering** - Keeps our land clean.
- **Bear Country: Store all Food in Vehicle** - Keeps your food from attracting wildlife, especially bears.
- **Register for Campground/Pay Park Fee** - Keeps a source of money to maintain the park and a tally of how many people are visiting the park.
- **Fire Warning** - Allows people to learn if a fire is acceptable and keeps the area safe.
- **Walk-in Area** - Allows people to hunt on certain areas of private lands.



In this task, students will be engaged in the higher order thinking skill of synthesis.

When finished discussing all signs, ask: **“Why are rules important?”** Allow students to respond. Make sure that students understand that stewardship encompasses a variety of things beyond not littering.

Assessment for Day 1:



Pass out a piece of paper to each student. Have students create a sign related to their school or community that emphasizes a rule or law that needs to be followed in the school or community to be a good steward of that area. Collect signs when students are finished and review them for accuracy.

TEACHER NOTE:
Give students as much time as needed to create their sign. Students may also share their sign in a way that makes sense in your classroom.

Day 2:



In this part of the lesson, students will play the Scenario Game. In this game, students will play different roles in a number of scenarios. Play the game in a space that is large enough for students to move around: classroom, playground, or gym. Name the space the “public land.” Divide students into Groups A and B. Each scenario will be played two times. After running through a scenario the first time, stop and discuss the provided questions. Once the class is done discussing, reassign Groups A and B per the directions, run the scenario again,



In this task, students will be engaged in the higher order thinking skill of application.

and discuss the differences. After running through all the scenarios, be sure to conclude with the idea that it takes many people to take care of our public lands.

3. Say: **“In our previous lesson, we discussed and made signs that reminded us of rules and laws that help us to be good stewards. Today, we will be playing a game in which we will act out different scenarios and how to be stewards in them.”**

Scenario 1: Don't Litter

Assign students their roles. (*Group A*: One student cleans the “public land” by picking up crumpled paper. *Group B*: The rest of the students drop their crumpled paper while they walk around the “public land.”) Pass out at least two crumpled pieces of paper to each *Group B* student. Set a timer for 30 seconds. Have *Group B* drop their pieces of paper throughout the area while *Group A* picks up as many as they can. When time is up, discuss with students the following questions:

- **“How effective was the *Group A* student?”**
- **“What challenges did the one student have?”**
- **“What impact does this have on our public lands?”**
- **“Who was being the steward? Who was not being a steward?”**

Pick up all of the paper and assign students new roles. (*Group A*: Have $\frac{3}{4}$ of students clean the “public land” by picking up crumpled paper. *Group B*: The remaining $\frac{1}{4}$ of students drop their crumpled paper while they walk around the “public land.”) Set a timer for 30 seconds. Have *Group B* drop their pieces of paper throughout the area while *Group A* picks up as many as they can. When time is up, discuss with students the following questions:

- **“How was this different from when we did it the first time?”**
- **“Who was being the steward? What does this show you about being a steward?”**

After students discuss, say: **“This scenario shows that if we only have one person being a steward we cannot keep our public lands clean. It takes many people being stewards to keep our land clean.”**

Scenario 2: Use Trails

Mark a path in your “public land” using tape or chalk.

Assign students their roles. (*Group A*: Have one student be in charge of keeping everyone on the path. This student will tap *Group B* members on the shoulder to signal to them to get on the path. *Group B*: The rest of the students will walk around the room. This group will purposely stay off the path. When they are tapped on the shoulder, they have to get on the path and stay there.) Have *Group B* stand on the path. Set the timer for 30 seconds and have *Group B* walk off the path. *Group A* tries to tap all *Group B* students on the shoulder, so they go back to the path. Remind students to walk, not run. When time is up, discuss with students the following questions:

- **“How effective was the *Group A* student?”**
- **“What challenges did the one student have?”**
- **“What impact does this have on our public lands?”**
- **“Who was being the steward? Who was not being a steward?”**

Assign students new roles. (*Group A*: Have $\frac{3}{4}$ of students be in charge of making students stay on the path. *Group B*: The remaining $\frac{1}{4}$ of students walk around the “public land.”) Have *Group B* stand on the path. Set the timer for 30 seconds and have *Group B* walk off the path. *Group A* taps all *Group B* students on the shoulder, so they go back to the path. Remind students to walk, not run. When time is up, discuss with students the following questions:

- **“How was this different from when we did it the first time?”**
- **“Who was being the steward? What does this show you about being a steward?”**

After students discuss, say: **“This scenario shows that stewards follow the rules of staying on designated paths. It takes many people being stewards to limit the number of roads and trails across public lands.”**

(OPTIONAL) Scenario 3: Don't Feed the Animals

Display animal cards around the room and assign students their roles. (*Group A*: Have one student be in charge of making sure that the animals never have three or more food cards in front of them, so the animals don't get sick. *Group A* may only remove ONE food card from in front of an animal at a time and place it in the designated trash area. *Group B*: The rest of the students will place food cards in front of the different animals.) Create a designated trash area and pass out food cards to *Group B* students. Say: **“If an animal has three food cards in front of it, the animal is sick, and I will take the animal sign down.”** Set the timer for 30 seconds and have *Group B* start to feed the animals. When time is up, discuss with students the following questions:

- **“How effective was the Group A student?”**
- **“What challenges did the one student have?”**
- **“What impact does this have on our public lands?”**
- **“Who was being the steward? Who was not being a steward?”**

Assign students new roles. (*Group A*: Have $\frac{3}{4}$ of students be in charge of collecting the food cards. *Group B*: The remaining $\frac{1}{4}$ of students “feed” the animals.) Set the timer for 30 seconds and repeat the activity. When time is up, discuss with students the following questions:

- **“How was this different from when we did it the first time?”**
- **“Who was being the steward? What does this show you about being a steward?”**

TEACHER NOTE: If you choose to do Scenario 3, print the Animal and Food Cards.

After students discuss, say: **“This scenario shows that stewards do not feed animals at parks. If only one person is a steward, our wildlife may learn to rely on human food, instead of what they are supposed to eat.”**

Day 3:

Say: **“In our previous lesson, we learned that we need MANY people to be stewards if we want to protect our lands and animals. Today, we will learn about people who demonstrate stewardship through their professional jobs.”**

4. Show the Careers in Stewardship PowerPoint. Use the information below to briefly describe each job.
 - **Park Rangers:** They may help maintain campground facilities, trails, and help with fire prevention and firefighting. Some enforce laws and regulations on public lands, roads, and campgrounds. They may also interact with the public during their patrols and visits to campgrounds. Some give fire education programs, provide information to visitors, and explain regulations to the public. They also enforce these regulations, taking appropriate action when necessary.
 - **Game Wardens:** They may enforce laws that are on the books to regulate fishing, hunting, and to protect wildlife and the environment. Game Wardens enforce wildlife laws on both public and private land.
 - **Biologists:** They may collect and analyze data, monitor wildlife populations, and recommend plans for wildlife management. There are different kinds of biologists that would work across the state:
 - **Aquatic Biologist** - Fish
 - **Conservation Biologist** - Wildlife and Habitats
 - **Terrestrial Biologist** - Mammals and Birds

TEACHER NOTE:
For additional information, contact an industry professional from Game and Fish or another state agency to come in and discuss the various jobs and responsibilities he/she has to protect our public lands. He/she could also discuss where he/she works which is discussed in step 5.

- **Maintenance:** These individuals might take care of the landscape, ensure overall upkeep, and maintain the facility.
- **U.S. Forest Service Forester:** They are skilled in planting, removing, or caring for trees while considering how a forest may develop over long time frames. From planting seedlings to inspecting a contractor's work, foresters provide the technical and professional expertise for evaluating the health of our forests.
- **Wildland Firefighter:** They are involved with wildland fire suppression/management/control, working on an "engines and helitack module," or are part of a hand crew with responsibility for the operation and maintenance of specialized tools or equipment. Other wildland fire related duties may involve fire prevention, patrol, detection, or prescribed burning.

When finished with the PowerPoint, say: **"All of these individuals are stewards through their jobs, but they can't do it alone. It takes EVERYONE to be a steward, not just the workers, to keep Wyoming lands for use now and in the future."**

5. Say: **"So where do these people work? Wyoming has 12 state parks, 2 national parks, 5 national forests, and 1 national grassland. We are going to take a Virtual Tour of our Wyoming State Parks."** Show the parks that you have selected from the website. After touring each park, have the class discuss the following questions:

- **"How is the land in the park being used?"** *Camping, fishing, sightseeing, animals grazing, etc.*
- **"Do you see signs of stewardship?"** *Rivers are clean, trails are marked, plants are growing, etc.*
- **"Who is responsible for the stewardship?"** *The visitors, the rangers, scientists, occupations mentioned earlier*
- **"What could happen if we don't take care of this land?"** *Animals could die, we couldn't fish in the lake, we wouldn't have a fun way to exercise, etc.*

TEACHER NOTE:
Step 5 can be a quick activity where the teacher just shows and discusses with students a few parks, or the teacher may choose to spend an entire class period allowing students to explore Wyoming State Parks website. Each State Park has a video and/or pictures with descriptions that highlight the features of the park.

When finished touring your chosen parks, say: **“Caring for the land is very important, and it takes many people to keep Wyoming lands clean, safe, and available for use.”**

Day 4:

Assessment:

Say: **“Over the last few lessons, we have learned how to be stewards of Wyoming. Stewardship is a key part of the job for some professionals. It takes many people to be stewards so that Wyoming can be enjoyed now and in future generations. Today, you will demonstrate what you have learned by writing or drawing a scenario about a person who is NOT being a good steward on public and private lands. When everyone is finished with their scenarios, you will exchange your scenario with a partner who will determine what is not showing good stewardship in your scenario.”**



In this task, students will be engaged in the higher order thinking skill of synthesis.



6. This assessment piece is the last “required” part of the lesson. Step 7 lists an additional activity you might want to do before the assessment. Pass out printer paper. Have students create a scenario either by writing or drawing someone not being a good steward. Once everyone is done, have students swap scenarios with a partner. Say: **“On the back of your partner’s paper, write your name, and draw or write a way that would solve the problem of people NOT being stewards in the scenario.”** *One student draws people camping with trash all around them; the partner could draw a sign that says no littering, and people cleaning up.* When students are finished, collect papers and check that students have correctly resolved the bad examples of stewardship.

7. *Optional activity:* To encourage visitors to be stewards of State and National Parks, Wyoming has adopted many initiatives to promote stewardship. The following websites highlight some of these initiatives and provide students with wonderful examples of stewardship. The teacher could assign groups of students to the different websites and allow them to become the experts on their given initiative. Student groups would answer the question: **“How can we teach and remind users of public and private lands to be stewards?”**

- Smokey Bear:
<https://smokeybear.com/en/prevention-how-tos>
- Play Clean Go: <http://www.playcleango.org/>
- Tread Lightly:
<https://www.treadlightly.org/learn/>
- Fishing and Boating:
<https://wgfd.wyo.gov/Fishing-and-Boating/Aquatic-Invasive-Species-Prevention/Threats>

Credits/Sources:

1. WYO PARKS. (2017). *Wyoming State Parks*. Retrieved August 9, 2017, from <http://wyoparks.state.wy.us/index.php/places-to-go/view-full-list-of-wyoming-state-parks>
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3. TreadLightly! Inc. (2013). *Learn*. Retrieved October 12, 2020, from <https://www.treadlightly.org/learn/>
4. EnvironmentalScience.org. (2017). *What is a Forest Ranger?* Retrieved August 9, 2017, from <http://www.environmentalscience.org/career/forest-ranger>
5. Media, Inc Gamewarden.org. (2017). *Game Warden Job Description*. Retrieved August 9, 2017, from <http://www.gamewarden.org/job-description>

6. Colorado Parks & Wildlife. (n.d.) *Biologist*. Retrieved August 9, 2017, from <http://cpw.state.co.us/aboutus/Pages/Jobs-Biologist.aspx>
7. USDA.gov. (n.d.) *Forest Service Careers*. Retrieved August 9, 2017, from <https://www.fs.fed.us/working-with-us/jobs/careers>
8. PlayCleanGo.org. (n.d) *Stop Invasive Species in Your Tracks*. Retrieved August 10, 2017, from <http://www.playcleango.org/>
9. Wyoming Game and Fish. (2017). *What are Aquatic Invasive Species*. Retrieved October 20, 2017, from <https://wgfd.wyo.gov/Fishing-and-Boating/Aquatic-Invasive-Species-Prevention/Threats>
10. Photo credits are listed in the PowerPoint presentations.

Don't Feed the Animals



Photo courtesy of Wyoming Game and Fish



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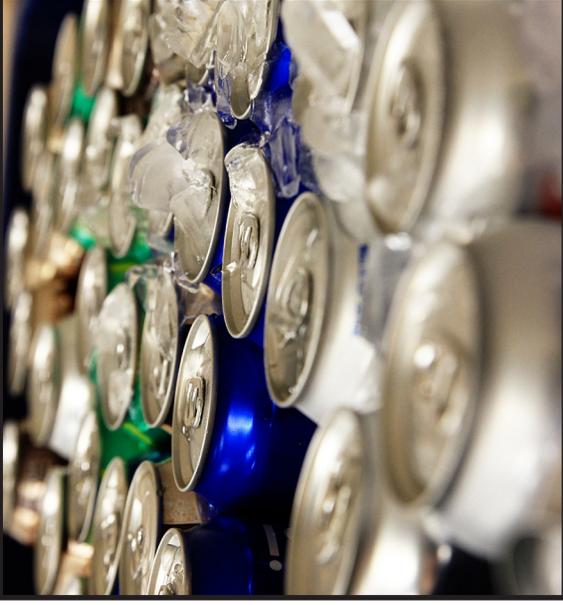


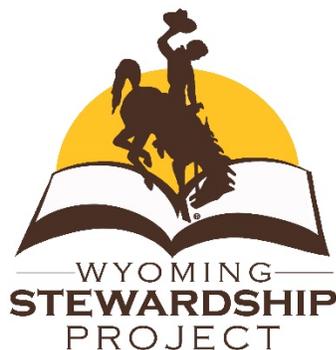
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Don't Feed the Animals





Lesson Seven: Cityscapes or Open Spaces?

Grade Level: 2nd Grade

Time: 30-40 minutes

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

Objective: Students will discuss the importance of Wyoming lands, the opportunity that they provide, and the importance of stewardship in providing these opportunities for current and future generations.

Purpose: Students learn that Wyoming lands are important to Wyoming culture.

Required Materials/Resources:

- Video: <http://www.travelchannel.com/videos/top-10-attractions-in-nyc-0212544> *Top 10 Attractions in NYC.* (Source 1) *Video length: 2 minutes 3 seconds*
- Video: <https://www.youtube.com/watch?v=9ZgzkqnWTsM> *Wyoming Sports and Recreation.* (Source 2) *Video length: 2 minutes 2 seconds.*
- Picture cards of Wyoming and New York City (only needed if not using the websites)
- Chart paper
- Student Journals OR notebook or printer paper to make Student Journal pages (one per student)
- Venn Diagram (one per student and one for teacher to display)
- Video: <https://www.youtube.com/watch?v=4hX26jwnMZ8> *Jessie Allen -That's WY.* (Source 3) *Video length: 2 minutes 57 seconds*

TEACHER NOTE:
Websites are included to teach this lesson. However, if you cannot access these websites, there are Picture Cards available to use in place of the videos. If you choose to use the Picture Cards, they will need to be printed for this lesson. The images may be copied one to a page or double-sided depending on your preference.

Suggested Teacher Preparation:

- Preview the NYC and WY tourism videos **OR** make copies of Wyoming and New York City Picture cards.
- For Assessment step, decide whether students will write a summary in their Student Journals or respond to the provided sentence stems.
- Write provided sentence stems where all students can see them.
- If having students use provided sentence stems, prepare Student Journal pages by typing/writing the following sentence stems on notebook/printer paper OR write the following sentence stems in Student Journals:
 - **Wyoming tourism is different from New York tourism because _____.**
 - **Wyoming tourism is the same as New York tourism because _____.**
 - **Wyoming's tourism is important because _____.**
 - **I can be a steward of Wyoming lands by _____.**
 - **I would feel _____ if these lands couldn't be used anymore because _____.**

Standards:

Social Studies: SS2.5.3, SS2.5.4 (Explicit), SS2.2.2, SS2.5.2 (Practiced/Encountered)

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

CVE: CV5.4.4 (Practiced/Encountered)

Vocabulary: (does not need to be explicitly taught prior to the lesson - words are included throughout the lesson)

- **Culture** - a way of thinking, behaving, or working that exists in a place or organization
- **Public land** - land owned by a government; may or may not be accessible to the public
- **Recreation** - an activity that is undertaken for pleasure or relaxation
- **Tourism** - the activity of traveling to a place for pleasure that can generate revenue from the enjoyment of Wyoming's land and/or resources
- **Tourist** - vacationer, traveler, sightseer, visitor

Instructional Procedure/Steps:

1. To begin the lesson with a review, ask: **“What are some of the ways people use land in Wyoming?”** Allow students to respond. Possible responses: *hunting, camping, fishing, hiking, sight-seeing, etc.* **“Why is it important to be stewards of our land?”** Allow students to respond. Possible responses: *wildlife populations could get too large/small, beautiful nature would be lost, these lands won't be available for us in the future, etc.* Say: **“Today, we are going to focus on how important Wyoming’s lands are to our culture or way of life. We have already discussed all the different outdoor activities we, as Wyoming citizens, can enjoy, but we also need to learn about how visitors come to experience and explore our state as well.”**

2.  Say: **“We are going to watch three videos today. While watching the first two videos, I want you to think about what examples of lands you see as well as what activities you notice people doing.”** Show the New York City video or display the pictures. After watching the video, say: **“Turn to your partner, and share at least three activities that you saw.”** Provide a minute for sharing. Have each pair share their ideas. Pass out and display the Venn Diagrams. Record ideas on the New York side of the Venn Diagram. Ask the whole group: **“What are some things you noticed about the activities and outdoor environment in New York?”** Possible responses: *Lots of people, crowded and busy streets, tall buildings, lots of traffic, no wide-open spaces, museums to visit, Statue of Liberty, Central Park*

3.  When students are finished responding, show the Wyoming Tourism video or display the pictures. After

TEACHER NOTE:
The purpose of watching these videos is for students to see that Wyoming has a unique culture (way of life) by comparing it with another way of life. The videos also demonstrate how tourism contributes to local economy. If you cannot access these videos, please use the Picture cards provided to initiate discussion.



In this task, students will be engaged in the higher order thinking skill of analysis by organizing ideas and recognizing trends.

watching the video, say: **“Turn to your partner and share at least three activities that you saw.”** Provide a minute for sharing. Have each pair share their ideas. Record ideas on the Wyoming side of the Venn Diagram. Ask the whole group: **“What are some things you noticed about the activities and outdoor environment?”** Possible responses: *wide open spaces, activities such as fishing, horseback riding, hiking, places and things to see such as Yellowstone National Park, local state parks, various wildlife*



4. When students are finished responding, say: **“We can see from our Venn Diagram that there are many ways these two places are different? Are there any ways they are the same?”** Allow students to respond. *Make sure students note that tourists visit both places, and both places rely on visitors to spend money to help provide jobs for the people that live there.* Say: **“The ways people live, work, and play are different in these two places. We are going to discuss the ways in which Wyoming is unique compared to many other places. Wyoming offers open spaces, jobs, and recreational opportunities for residents and tourists. People can go hunting, fishing, camping, biking, and visiting parks like Yellowstone National Park. Due to all these opportunities, Wyoming attracts many visitors. They are called tourists.”** Ask: **“What are the benefits of having tourists visit Wyoming?”** Facilitate discussion using think-pair-share, equity sticks, etc. Possible responses: *Income for schools and roads, jobs for people, tax benefits.* Ask: **“What might be problems that we need to consider when tourists visit our state?”** Allow students to respond. Possible responses: *litter, overuse of trails, interference with animals, people not following rules, etc.* Ask: **“Why is being a steward important to Wyoming lands?”** *If we don't take care of our lands, we won't have all these outdoor opportunities; we won't make*

TEACHER NOTE: If students completed their Venn Diagrams before sharing with the whole class, you may also use the student Venn Diagrams as an assessment.

money from tourists; people won't have jobs; future generations won't be able to enjoy what we have now; etc.

5. Say: **“We are going to watch the third video now. While you are watching, I want you to notice the different jobs Jessie talks about, and how she is involved with tourism in Wyoming.”** Show video about Jessie Allen:

<https://www.youtube.com/watch?v=4hX26JwnMZ8> Ask the whole group: **“What are some things you noticed?”** Possible responses: *guest ranch, health and wellness events, promotion of tourism, etc.*

6. To close, write these five sentence stems on the board. Ask students to turn and share their responses with a partner.

- **Wyoming tourism is different from New York because _____.**
- **Wyoming tourism is the same as New York tourism because _____.**
- **Wyoming’s tourism is important because _____.**
- **One job I could see myself doing is _____.**
- **I can be a steward of Wyoming lands by _____.**

Assessment:

After students have shared with their partner, pass out their Student Journals or a piece of notebook paper for students’ journals. Have students respond to the five sentence stems in their journal, OR have students write a summary of their learning. Students could also include a picture. Collect journals when students are finished. Check journal entries to ensure that students are understanding the concepts correctly.

Credits/Sources:

1. Scripps Networks, LLC. Travel Channel. (2017). *Top 10 Attractions in NYC*. Retrieved August 10, 2017, from <http://www.travelchannel.com/videos/top-10-attractions-in-nyc-0212544>
2. Visit the USA. (2015). *Wyoming Sports and Recreation*. Retrieved October 4, 2022, from <https://www.youtube.com/watch?v=9ZgzkqnWTsM>
3. Travel Wyoming. (2017). *Jessie Allen – That's WY*. Retrieved March 28, 2019 from <https://www.youtube.com/watch?v=4hX26JwnMZ8>
4. Photo Credits are listed on individual images.

Picture Cards



Photo Credit: Wyoming State Parks



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Picture Cards



Photo Credit: Stephanie Russell

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Picture Cards



Photo Credit: Stephanie Russell



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Picture Cards



Photo Credit: Wyoming Game and Fish

Picture Cards



Photo Credit: Tishman Speyer

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Picture Cards



Photo Credit: Business Insider



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Picture Cards

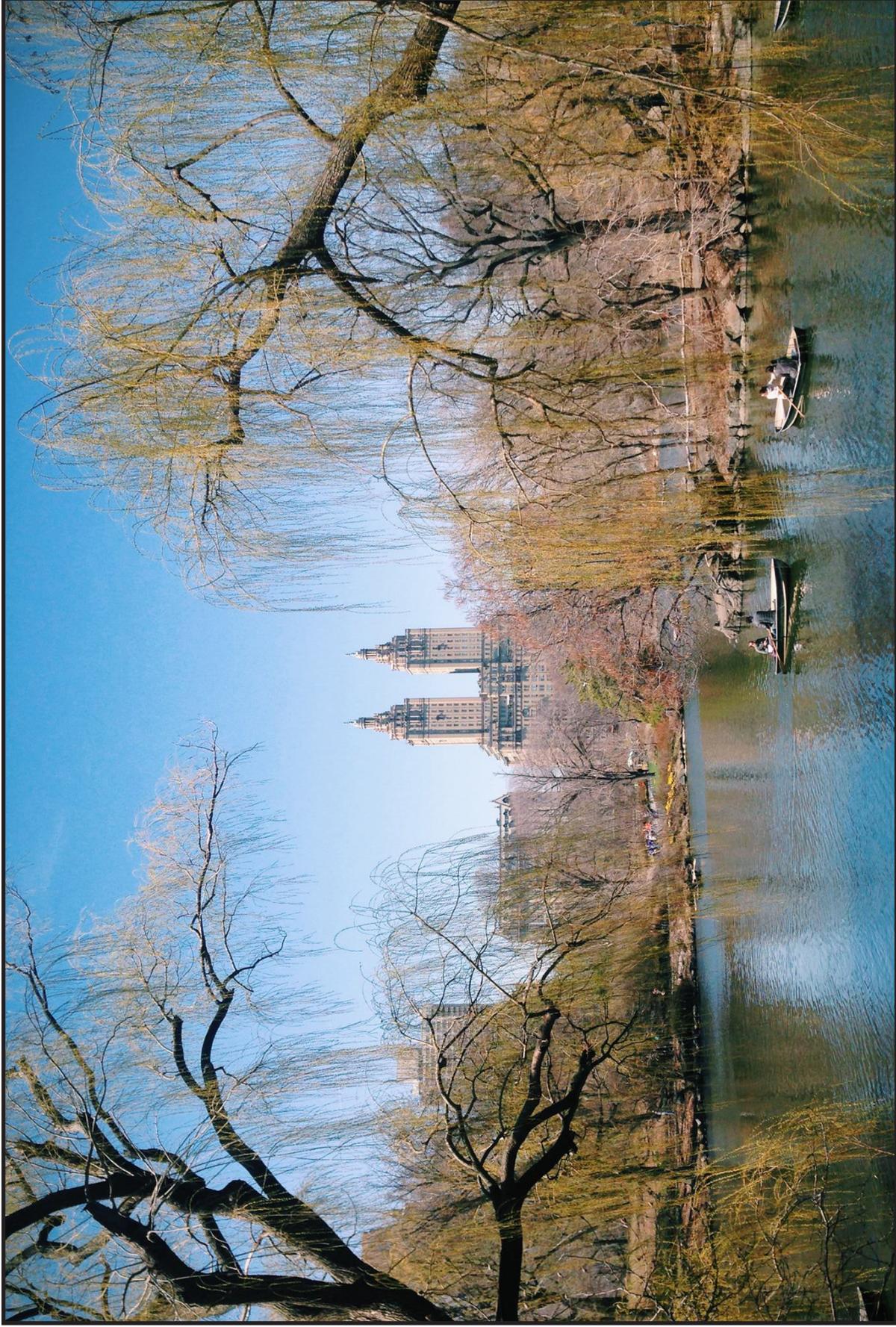


Photo Credit: Central Park Conservancy



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Picture Cards



Photo Credit: Daily Mail

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Venn Diagram

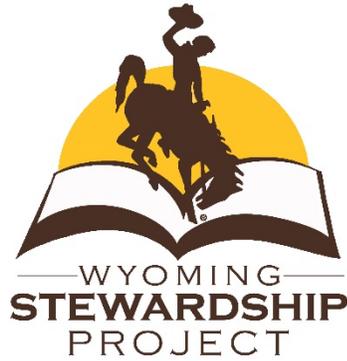
Tourism

Wyoming

New York

Same/Both





Lesson Eight: Discovering Wyoming's State Parks

Grade Level: 2nd Grade

Time: Day 1: Steps 1 & 2 - 30 minutes

Day 2: Step 3 - 30 minutes (or as long as necessary for researching)

Days 3 & 4: Step 4 & 5 – 30-45 minutes to finish projects and have students present them if you choose to do so

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

Objective: Students will demonstrate how well they can identify Wyoming's unique terrain, its multiple uses, the importance of caring for it, and how to be a steward of it.

Purpose: Students show what they can do to be stewards of Wyoming's lands for current and future generations.

Required Materials/Resources:

- Talking chips (other items can be used like blocks, counters, etc.)
- Wyoming State Parks website
<https://wyoparks.wyo.gov/index.php/places-to-go/view-full-list-of-wyoming-state-parks> (Source 1)
- Brochure template (one per student and one for teacher to model). It is a bi fold. Copy front and back.
- Brochure rubric (one per student and one for teacher to review)
- Park Maps & Brochures pages from the Wyoming State Parks website (either a different one per student or a copy per student of the same park)

- Park Map & Brochure for teacher to model (Must be different than the one(s) students are assigned. If possible, choose two.)
- Electronic devices (optional)
- Highlighters
- Colored pencils, markers

Suggested Teacher Preparation:

- Decide if you will have students present their brochures to the class or another class after they have finished them.
- Choose a specific park(s) or national forest(s) in Wyoming for students to use and one or two for you to model that is/are different than what the students will use. Students can each do a different park, or every student can do the same park. Follow instructions in next bullet to print the Maps & Brochures.
- Go to the Wyoming State Parks website <https://wyoparks.wyo.gov/index.php/places-to-go/view-full-list-of-wyoming-state-parks>. Choose a park. Once on a park page, look for the green box on the left, and click on the Maps & Brochures option. Download and print the copies needed for the class.
- If you do not want to make copies of the Park Maps & Brochures, have students directly access the maps and brochures themselves on electronic devices. If doing so, set up the devices beforehand, so students do not have to navigate through the website to find the maps and brochures.
- Review the Talking Chips Kagan strategy. (Source 2) https://www.kaganonline.com/free_articles/dr_spencer_kagan/281/Kagan-Structures-A-Miracle-of-Active-Engagement,3
- For days 3 & 4, post a checklist of brochure requirements for students to reference.

Standards:

Social Studies: SS2.1.1 (Practiced/Encountered)

ELA: 2.W.7, 2.W.8 (Explicit), 2.W.2 (Practiced/Encountered)

CVE: CV5.1.4, CV5.3.2, CV5.4.1, CV5.4.4 (Practiced/Encountered)

Vocabulary: No new terms are introduced in the lesson.

Instructional Procedure/Steps:

Day 1:

1. Introduce the Talking Chips Kagan Strategy, so students can review ways that Wyoming's terrain is unique; the many different uses of the terrain; ways that lands are managed and cared for with rules and regulations; and the definition of stewardship. Put students into small groups. Each student gets 3 chips. Say: **"We are going to review the learning from this unit by discussing questions in five rounds. You can only answer a question if you have a chip to put in the pile. By the time the rounds are finished, all of your chips must be used. If you are out of chips, you cannot answer, so everyone has a chance to participate. Once everyone in the group has used all of their chips, everyone can retrieve their chips and continue answering if necessary. Questions?"** Monitor groups to make sure they are following the directions. Pose the following questions for each round:
 - Round 1 – **"What are some different types of terrain found in Wyoming?"**
 - Round 2 – **"What are some activities or uses for lands in Wyoming?"**
 - Round 3 – **"What are some rules or ways to care for our lands in Wyoming?"**
 - Round 4 – **"How can we be stewards of Wyoming's lands by following established rules and laws in those areas?"**
 - Round 5 - **"What is a job you might like to have that would help people who visit Wyoming?"**
2. Say: **"You are going to create a brochure for a Wyoming State Park. Let's review what a brochure is and talk about how it ensures stewardship."** Go to the Wyoming State Parks website. Choose a park. Once on a

TEACHER NOTE:
For step 2, if you have a state park close to your area, use this as an opportunity to go visit the state park or have an expert from the park come into the classroom to present the information versus using the online brochure.

park page, look at the green box on the left and click on the Maps & Brochures option. Do this for a few parks.

For each brochure you view, ask:

- **“What is the terrain of this park?”**
- **“What activities are available at this park?”**
- **“How do we know how to care for this park?”**
- **“Why is this brochure important for visitors of the park?”** *So visitors know what activities are available, what the rules are, where the land is located, etc.*

Day 2:

3. Model how to complete/fill in the brochure template using one of the State Parks you discussed in the previous part of the lesson. Make sure the sample highlights a different park than the one(s) students will use. Pass out the rubrics and begin by showing the blank template and explaining each of the sections that need to be included in the brochure. Model how to highlight terrain types, uses, and rules/regulations from the printed Wyoming State Park brochure or electronic version on the website. Using the brochure instructions below, model for students how to paraphrase information from the published brochure and put it into your own words to complete the student brochure template. Review the rubric and write a checklist of required sections on the board, so students have clear expectations about what they need to do and how they will be scored. Also, as a whole group, create a word bank that may be commonly used in the brochures for student reference.

TEACHER NOTE:

Monitor the progress of students as they research and work to assist students that are struggling and to track student time management. There is a potential opportunity to practice ELA standard 2.W.5 by including a peer edit/review step to the making of the brochures.

Brochure Instructions:

The following items need to be included in the brochure:

- At least two examples of stewardship.
- Naming the terrain (mountain, body of water, forest, or grassland), describing what it looks

like, and drawing the area.

- At least two uses of terrain.
- At least two rules/regulations describing how to care for public lands.
- Each section above is labeled and organized.

Days 3-4:

4.  Pass out research and necessary materials, and have students work on their individual brochures. Provide as much time as needed for students to complete their brochures. If you are having students present their brochures to the class or possibly to a lower grade level, allow sufficient time for the presentations, as well. (Students' presentations would address ELA standard, 2.SL.2.)



In this task, students will be engaged in the higher order thinking skill of synthesis.

Assessment: Use the rubric provided to score student brochures and presentations if applicable. It will show how well students know how to identify terrain, the uses of our land, how to care for our public lands, and how to be a steward of our public lands in Wyoming.

Credits/Sources:

1. WYO PARKS. (2017). *Wyoming State Parks*. Retrieved August 9, 2017, from <https://wyoparks.wyo.gov/index.php/places-to-go/view-full-list-of-wyoming-state-parks>
2. Kagan, Dr. Spencer. Kagan Publishing & Professional Development. (2018). *Kagan Structures: A Miracle of Modern Engagement – 6 Talking Chips*. Retrieved August 26, 2018, from https://www.kaganonline.com/free_articles/dr_spencer_kagan/281/Kagan-Structures-A-Miracle-of-Active-Engagement,3

I can be a steward of Wyoming's lands by:



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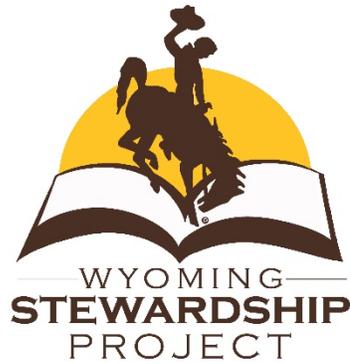
Handwriting practice lines consisting of six horizontal lines.

Wyoming State Park Brochure

Rubric

I am a Steward of Wyoming Lands				
	4	3	2	1
Stewardship	Student includes 3 or more examples of stewardship.	Student gives 2 examples of stewardship.	Student gives 1 example of stewardship.	No example of stewardship is given.
Terrain	Student describes the terrain by using the words: mountain, body of water, forest, or grassland and includes details of what the Terrain looks like. Student's drawing matches written description.	Student describes the terrain by using the words: mountain, body of water, forest, or grassland. Student's drawing matches written description.	Student does not describe the terrain by using the words: mountain, body of water, forest or grassland. Student's drawing does not match written description	Student does not describe and/or draw the terrain.
Uses	Student includes 3 or more uses of the terrain.	Student includes 2 uses of the terrain.	Students includes 1 use of the terrain.	Student does not include a use for the terrain.
Rules/ Regulations	Student includes 3 or more rules/ regulations to care for public lands.	Student includes 2 rules/regulations to care for public lands.	Student includes 1 rule/regulation to care for public lands.	Student does not include a rule/ regulation to care for public lands.
Organization	Student work is organized/labeled as instructed by having a section for terrain, use, caring for the land, and stewardship. Project shows creativity.	Student work is organized/labeled as instructed by having a section for terrain, use, caring for the land, and stewardship.	Student has 3 sections organized and labeled.	Student has 2 or less sections organized and labeled.
(Optional) Presentation	Student speaks clearly and describes their project in detail to the audience.	Student speaks clearly and describes their project to the audience.	Student speaks clearly and partially describes their project to their audience.	Student speaks to the audience but has difficulty describing their project.





Glossary

Culture	a way of thinking, behaving, or working that exists in a place or organization
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
Natural resources	sources of life, materials, or energy that we are able to get naturally from the earth
Private land	land owned by a person or group and kept for their exclusive use; permission and access for any purpose must be granted by the owner
Public land	land owned by a government; may or may not be accessible to the public
Recreation	an activity that is undertaken for pleasure or relaxation
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)

Scenery	the view of natural features that are pleasing to look at
Stewardship	As Wyoming citizens, we are stewards entrusted with the responsible development, care, and use of our resources to benefit current and future generations
Terrain	the physical features of an area of land
Tourism	the activity of traveling to a place for pleasure that can generate revenue from the enjoyment of Wyoming's land and/or resources
Tourist	vacationer, traveler, sightseer, visitor