

THE GRAND ADVENTURE!



Discover the amazing wildlife, geology, history, and ecosystems of Grand Teton National Park as you experience what it takes to be a Park Ranger!

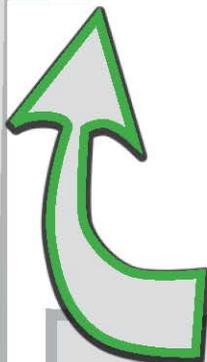
Name:





Welcome!

Hey kids! Do you want to learn about what it takes to be a National Park ranger? Do you want to have fun exploring and discovering the park? Then follow the instructions below to become a Junior Ranger in Grand Teton National Park!



LOOK!

To earn your patch or badge:

- Explore the park! Be sure you and your family think about safety. Keep your distance from wildlife, stay on trails, and avoid hazards like fast rivers.
- Complete all the activities on the required pages, which are marked with an arrowhead. This includes attending a ranger-led program.



Arrowhead: Required

- You pick! Choose the rest of your activities based on your age.



Wolf: Ages 7 and Under
Choose at least 3



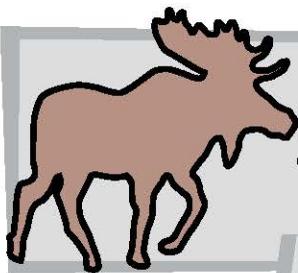
Bear: Ages 8–10
Choose at least 5



Bison: Ages 11+
Choose at least 7



Ranger Tips



Grand Teton is known for its moose! Murie the Moose is very curious, but also very shy. He is hiding on twelve pages of this booklet. Count how many times you can find Murie the Moose!

How many times did you find him?

Look for vocabulary words in green. If you do not know what they mean, you can find their definition on this page!

Artifacts

Objects from many years ago which represent a unique culture.

Habitat

The type of natural area that a plant or animal normally lives in.

Backcountry

A wild, natural area where humans are only visitors.

Hibernate

To sleep through the winter season without eating or drinking.

Ecosystem

Places where plants, animals, and natural cycles connect.

Historic District

A place where you can visit the past by viewing historic buildings and objects.

Fault

A large crack in the earth's crust, along which two pieces of earth move.

Resources

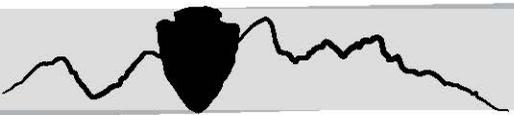
Manmade and natural things that the National Park Service works to protect.

Look for signs like this one to learn about the different types of park rangers in Grand Teton!

Sediment

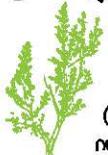
Material such as dirt, sand, or rocks that have been moved by water, ice, or wind.





Ranger Bingo

Experiencing the park is an important part of any park ranger's job. Keep track of your experiences by completing Ranger Bingo! Try for four in a row, or for an extra challenge, try for a blackout!

<p>Listen to running water</p> 	<p>Spot a lodgepole pine</p> 	<p>Collect the park stamp:</p> 	<p>Spot an animal bigger than you</p> 
<p>Spot the Grand Teton</p> 	<p>Meet another Junior Ranger!</p>	<p>Spot</p> 	<p>Find & write the name of something older than you</p> 
 <p>Ask a ranger a question about the park</p>	<p>Find & draw an animal track</p> 	<p>Smell</p>  <p>(but do not pick!)</p> <p>Sagebrush</p>	<p>Spot an animal smaller than you</p> 
<p>Find & write the name of something in nature that is red:</p> 	<p>High five a ranger!</p> 	<p>Dip your hand in a glacially-carved lake!</p>	<p>Find 5 pieces of litter and put them in the trash or recycling</p> 

Learn with a Ranger



Interpretive park rangers share the park's stories with visitors. They teach people about the park and its **resources**. They work at the visitor centers and lead activities like campfire talks, guided hikes, and history walks to inform and inspire visitors.



Attend a ranger-led program. A full schedule of these can be found in the park's newspaper, The Grand Teton Guide. After attending a program, get the ranger's signature on this page and answer the questions below.



Program Title: _____

Date: _____

Ranger Signature: _____

What was the ranger program about?

What is one thing you learned?

If you were a ranger, what would you want to teach people about?

Don't forget to do what interpretive rangers do and share what you have learned with someone else!

Keep a Clean Camp



Law enforcement rangers act as the police of the National Park. These rangers work to keep everyone safe and ensure that everyone follows the rules in order to protect the park. You can find law enforcement rangers driving the roads, climbing the mountains, floating the river, and almost anywhere in between.

Law enforcement rangers make sure people follow the rules for a clean camp so that bears can't get to any item that smells like food.

These visitors left their campsite for the day, but forgot to clean their camp. Put an X over any item the visitors should have locked away so bears won't find it!



Hike the Tetons



The Teton **backcountry** is a wild and beautiful place. **Backcountry rangers** work to keep it unspoiled and to keep visitors safe. These rangers issue permits, give safety tips, and hike Grand Teton's 230+ miles of trails. Some backcountry rangers also rescue people!

Patrol a trail, just like rangers do! Put a circle around the items you should bring, and an X across the items you shouldn't bring! Then, write a report about the trail you hiked!



Date: _____

Trail Name: _____

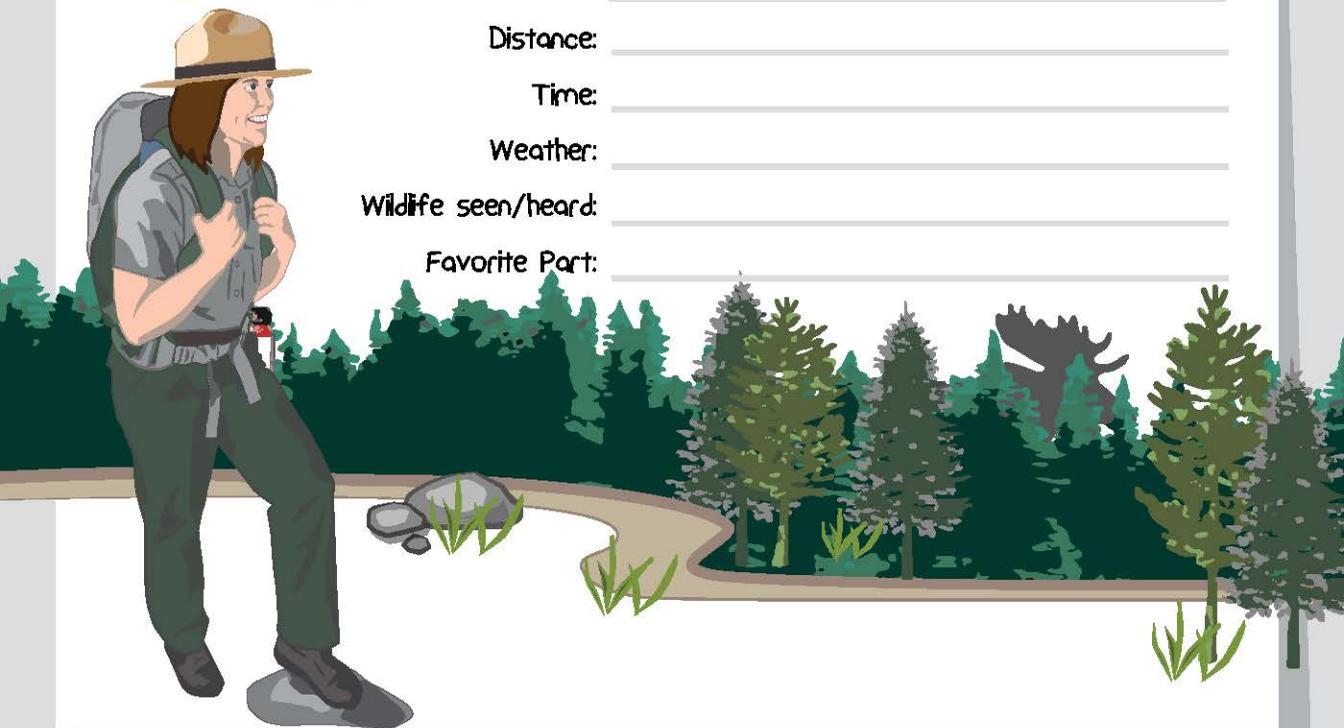
Distance: _____

Time: _____

Weather: _____

Wildlife seen/heard: _____

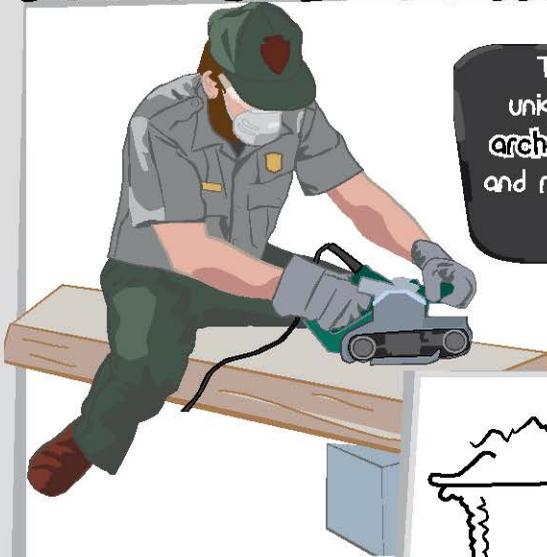
Favorite Part: _____



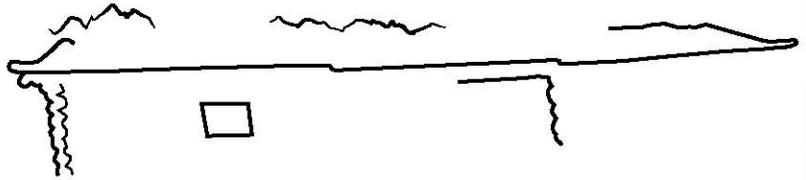


Restore History

The history of the Jackson Hole valley is full of unique and colorful human stories. Park **historians** and **archeologists** work to uncover this history, to preserve and restore **artifacts**, and to record what they find in order to keep these stories alive today.

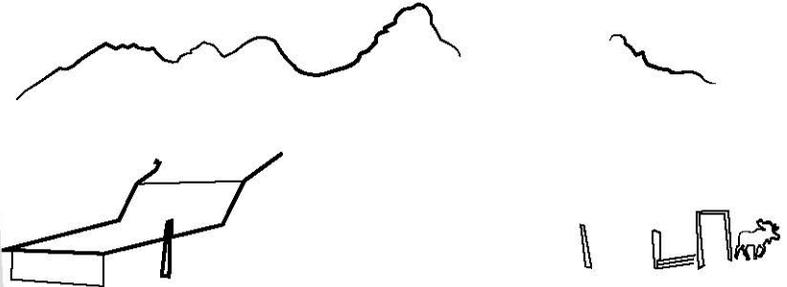


Cunningham Cabin



Visit one of the three **historic districts** shown here.

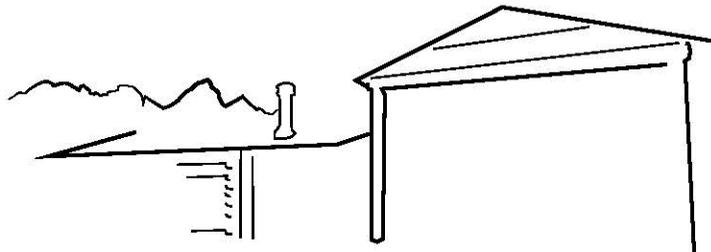
Moulton Barn (Antelope Flats & Mormon Row)



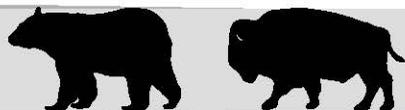
After exploring the area, help restore these historic buildings by drawing in the missing parts of the buildings and their surroundings.

Menor's Ferry General Store

Next, draw a person in the scene doing something you think may have been part of daily life 100 years ago.



Puzzle the Past



Use the word bank to fill in the missing words of the following paragraph. Then, use the numbered letters to discover the answer to the question below.



The first humans entered the Jackson Hole valley about 11,000 years ago. These _____⁸-gatherers spent the _____⁶ and summer seasons in the valley following _____⁵ and ripening plants. They left behind artifacts such as projectile point _____², roasting pits, tipi rings, stone-grinding tools, _____⁴ and arrows, soapstone bowls, and clay _____⁷. Between 1700 and 1850, American Indians traded with European American trappers and explorers for goods like _____³, axes, knives, and horses. The Shoshone, Bannock, Blackfoot, Gros Ventre, and Crow were some of the tribes who spent time in the area. These people, along with their customs and _____¹, remain a vital part of Grand Teton's story today.

bows

culture

pottery

spears

beads

spring

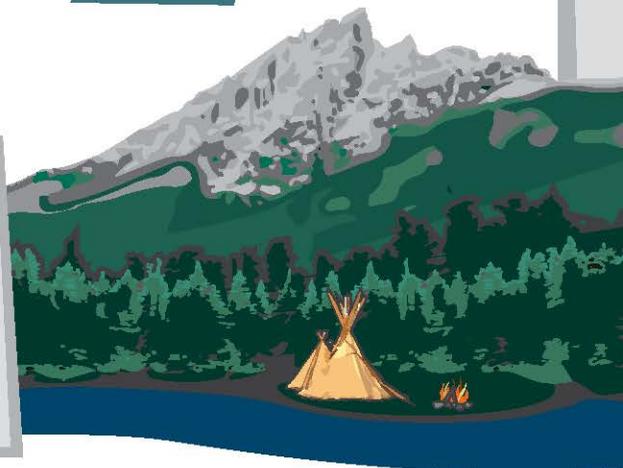
hunter

wildlife

What word, thought to mean 'many pinnacles', did the Shoshone give to the Teton Range?

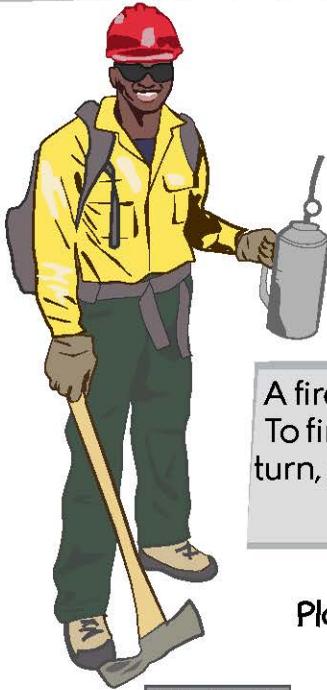
1 2 3 4 5 6 7 8

What name would you give to the Tetons?





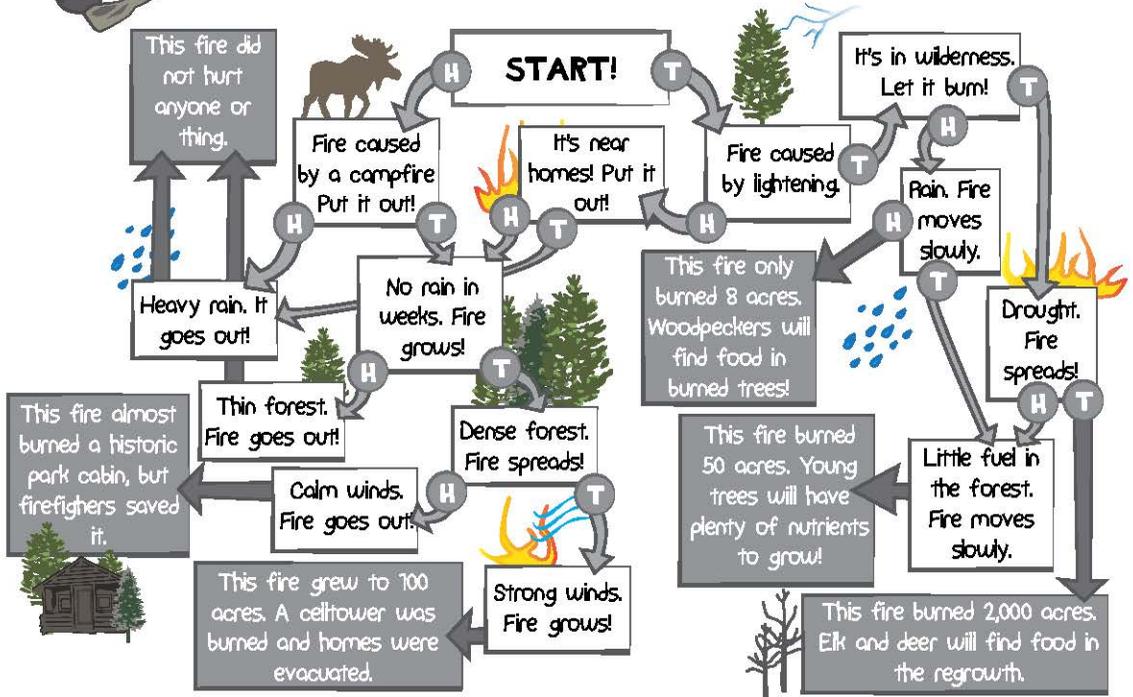
Follow the Fire



Fire plays an important role in the park's **ecosystems**. The park's **fire crew** works to keep people and structures safe by putting out some fires. Sometimes, they let fires burn or even set fires to keep the ecosystem healthy.

A fire has started in the park! What will happen to this fire? To find out, use a small rock or twig as a game piece. Each turn, flip a coin and move your game piece along the heads (H) or tails (T) line to the next space.

Trace and color in the path your fire takes. Play again to discover other paths a fire may take.



Meet a Rock



The Teton Range has amazing, unique geological features. **Park geologists** study these features and the forces that made them, including the uplifting of the mountains, the movements of the glaciers, the formation of rocks, and more.



Gneiss (say 'nice')

- Metamorphic
- 2.7 billion years old!
- Striped
- Sparkles

Granite

- Igneous
- 2.5 billion years old!
- Salt and pepper color
- Sparkles



Limestone

- Sedimentary
- 500 million years old
- Layered
- May have fossils



Find an interesting rock. Take a moment to study the rock, then record what you notice below. Remember to put it back when you're done!

Where did the rock come from? _____

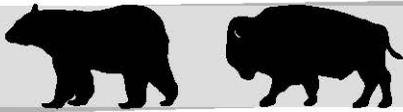
What color is it? _____

How does it look? Striped? Spotted? _____

How does it feel? Smooth? Bumpy? _____

Is it smaller than your hand? Bigger? _____

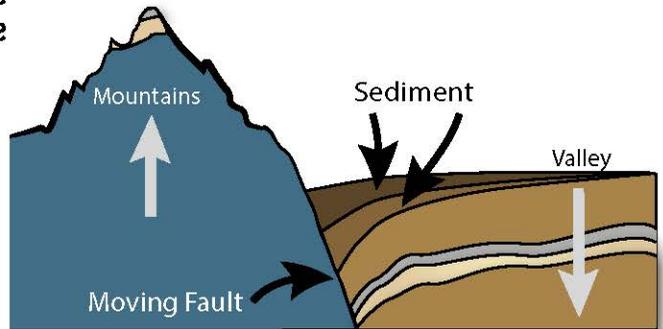
Can you identify the rock?



Build the Mountains

A **fault** runs along the base of the Teton Range. Earthquakes along the fault have caused the mountains to rise and the valley to drop.

Complete the equations below to learn more about how the Tetons were formed. (Hint: Use the park map to find the elevation of the Grand Teton.)



How much movement has occurred on the fault?

$$\boxed{\text{Elevation of the Grand}} - \boxed{6,770 \text{ feet}} = \boxed{\text{Elevation of Valley}} = \boxed{\text{Vertical Relief}}$$

The valley has filled in with **sediment** since the mountains began rising. The true valley floor sits 23,000 feet below where we stand today.

$$\boxed{\text{Vertical Relief}} + \boxed{23,000 \text{ feet}} = \boxed{\text{Valley Drop}} = \boxed{\text{Total Displacement}}$$

How many earthquakes did it take to build the Tetons?

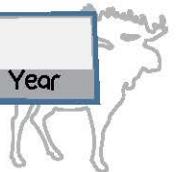
A typical earthquake along the Teton fault measures about 7.5 in magnitude and causes about 6 feet of displacement on the fault.

$$\boxed{\text{Total Displacement}} \div \boxed{6 \text{ feet}} = \boxed{\text{Avg. Movement}} = \boxed{\# \text{ of Quakes to Build Tetons}}$$

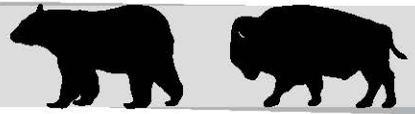
How quickly are the Tetons rising?

The Teton range began rising about 10 million years ago.

$$\boxed{\text{Total Displacement}} \div \boxed{10,000,000 \text{ years}} = \boxed{\text{Age of Mountains}} = \boxed{\text{Avg. Growth per Year}}$$

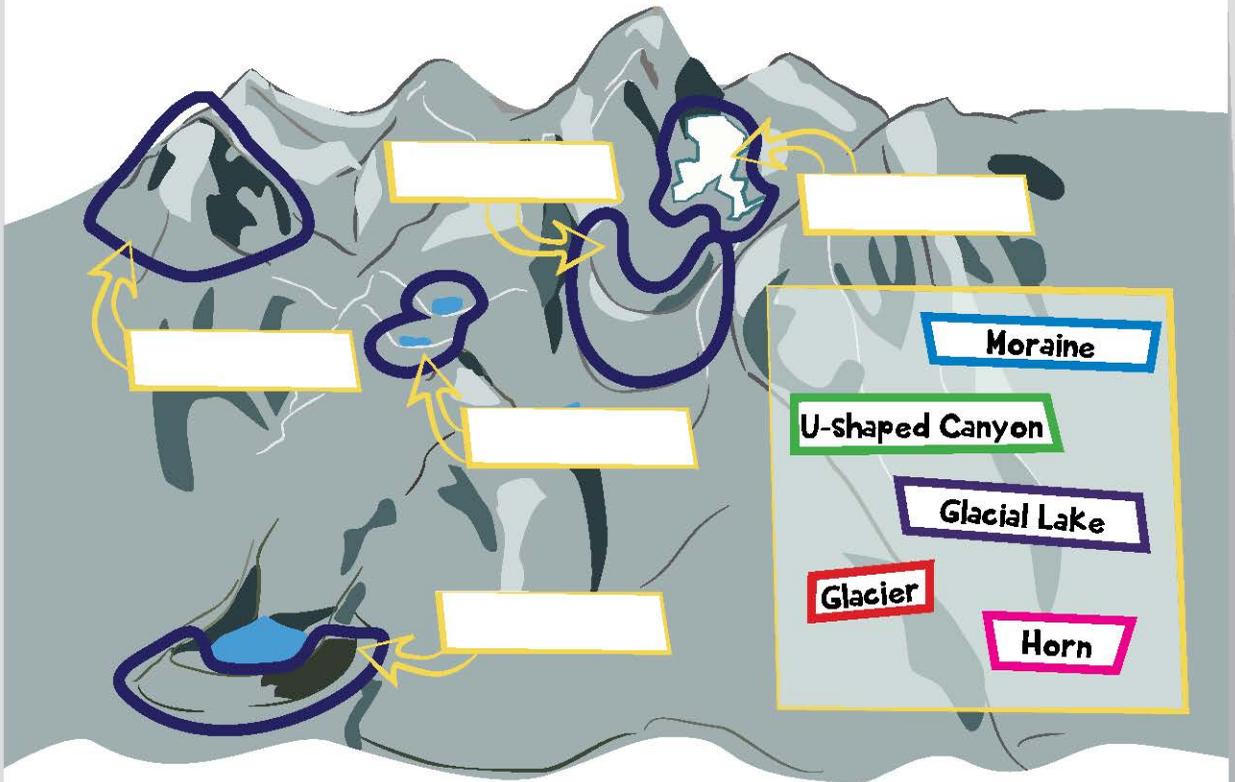


Sculpt the Range



Glaciers act as sculptors, carving out unique and distinct features in the mountain range. Beginning around 2 million years ago, and ending only 14,000 years ago, huge glaciers carved out the valley. Only about a dozen small glaciers remain in the park today.

Read the definitions of each glacially-created feature below. Then, find each feature on the diagram and fill in the blank with the proper label.



Horn: A sharp, pyramid-shaped peak.

Moraine: Mounds of **sediment** deposited by glaciers.

U-shaped Canyon: A wide, rounded valley.

Glacier: A large sheet of snow and ice that is gradually moving with gravity.

Glacial Lake: A lake occupying a place where a glacier used to be.

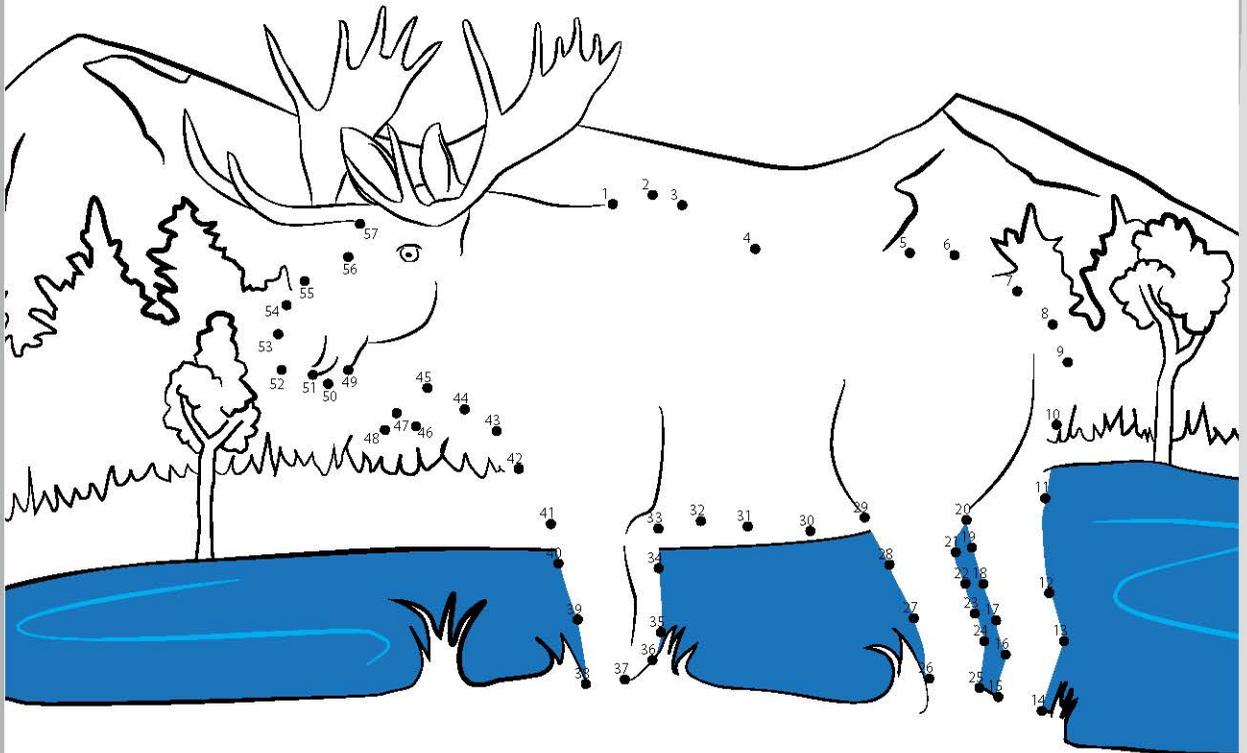


Connect & Color

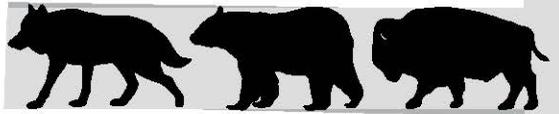
Grand Teton National Park provides excellent **habitat** to many animals. Scientists like **wildlife biologists** and **ecologists** study the park's living things to learn more about Grand Teton's wildlife and ecosystems. They stay busy observing, counting, and protecting all species in the park.



Connect the dots and color in the scene to discover an animal that lives in the wetland habitat, can dive nearly 20 feet underwater, and loves to eat willow!



Explore a Habitat



Alpine

- High elevation
- Windy, cold
- Harsh



Forest

- Shaded
- Diverse
- Sheltering



Sagebrush

- Low elevation
- Dry, rocky soil
- Wide open



Wetland

- Near water
- Very diverse
- Lush

Visit 1 of the 4 main **habitat** types in the park. Find a quiet place to sit and observe the area around you for five minutes.

Which habitat are you in? _____

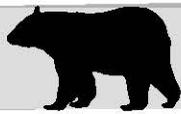
What do you see? _____

Hear? _____

Smell? _____

Name 3 animals that live here: _____

Where would you find food, water, and shelter if you were an animal in this **habitat**?



Prepare for Winter

Bears in Grand Teton **hibernate** through the winter season. But they must find and eat enough food before they go to sleep for months.

Help this bear find as much food as possible before reaching its winter den! Trace through the food you find, and count them at the end.

Start!

Finish!

Huckleberries

Log full of bugs

Raspberries

Moths

Grass

Meat

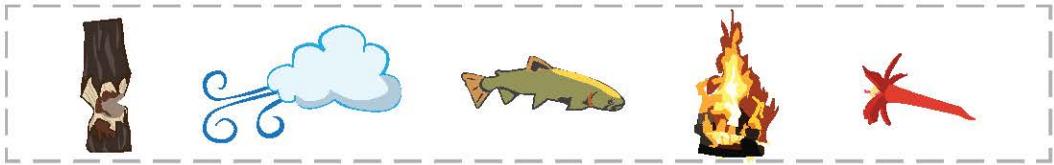
How many pieces of food did the bear find?

Match & Adapt



Adaptations are physical or behavioral traits that help an animal survive in its specific **habitat**. For example, river otters have webbed feet that them better swimmers.

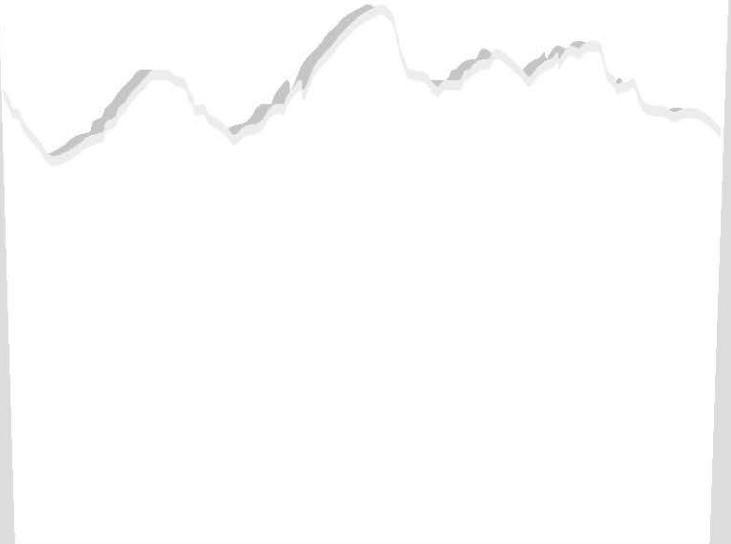
Draw a line to match at least 3 traits from the top row to the plant, animal, or process that it's adapted to on the bottom row.

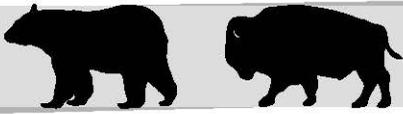


Draw an Imaginary Animal

Draw an imaginary animal that has at least three adaptations which help it survive in the harest habitat in the park, the alpine environment.

Hints: Think about how it will find food, water, or shelter. How will it move? How will it stay warm?



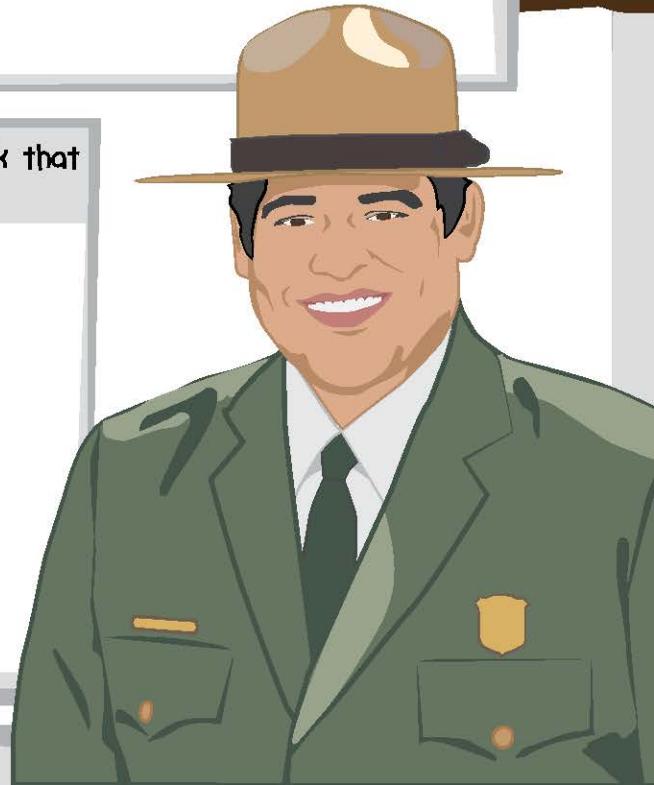


Imagine the Future

The park superintendent acts like the president of the National Park. The superintendent works with other experienced leaders to make important decisions about park management and to plan the future of the park.

Imagine that you are the superintendent of Grand Teton National Park. What are two things that you would try to change about the park?

What are two things about the park that you hope never change?



Map It

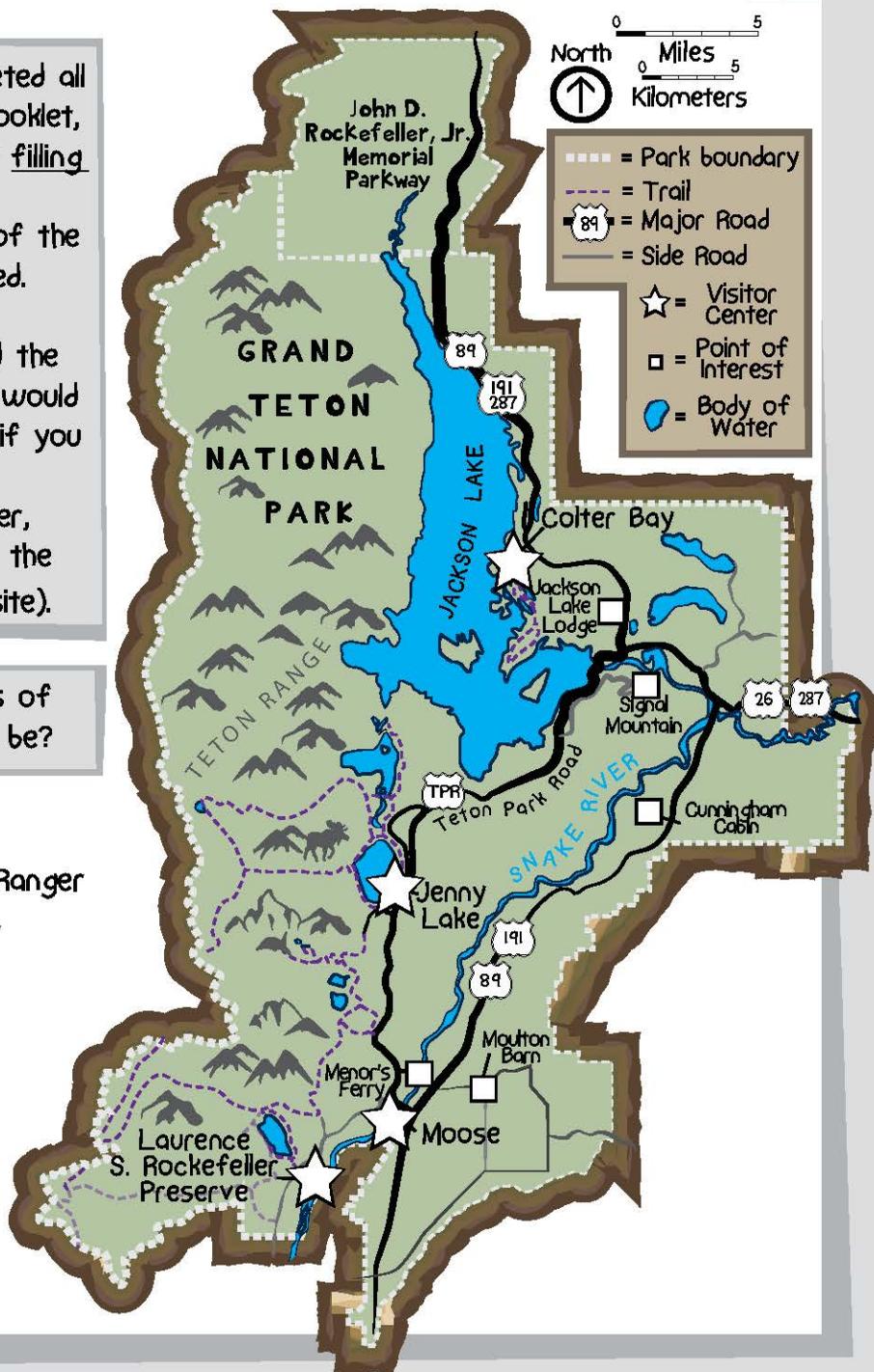


Once you have completed all the activities in this booklet, retrace your steps by filling in the white symbols on the map of the places you explored.

Draw a circle around the place in the park you would most like to work at if you were a ranger (like a visitor center, **backcountry** trail, the river, or a historic site).

Which of the types of rangers you like to be?

- Interpretive Ranger
- Law Enforcement Ranger
- Backcountry Ranger
- Historian
- Archeologist
- Firefighter
- Geologist
- Scientist
- Superintendent





Grand Teton Junior Ranger

Certificate of Achievement

"As a Junior Ranger, I promise to appreciate, protect, and respect Grand Teton National Park and all wild places wherever I go."



_____ is hereby granted the title of Junior Ranger in Grand Teton National

Jr. Ranger Signature: _____

Ranger Signature: _____

Date: _____