You will participant in a guided education tour dedicated to teaching the students from Bluejacket, OK about the natural wonders of Yellowstone National Park.

This journal belongs to

_____

and was completed in [DATE] while

I was in Yellowstone National Park.

[Name of teacher and/or field guide]

invite you to record in this journal

all that you see, feel, smell, and think

during your Yellowstone visit.

Take the Yellowstone Pledge

"*I pledge to protect Yellowstone National Park. I will act responsibly and safely, set a good example for others, and share my love of the park and all the things that make it special.*"

_____

Pledger's Name

1. Give Wildlife room, use a zoom.
2. Mask up.
3. Follow the beaten path.
4. Be bear aware.
5. Watch out for water.
6. Practice safe selfies.
7. Enjoy the ride.
8. Leave your drone at home.
9. Clean, Drain, Dry.
10. Stash your trash.
11. Leave what you find.

*Thanks for putting the Pledge into action!
If you see someone whose behavior might hurt them,

The Next Generation of Park Caregivers

Not all park service employees are Rangers that chat with park visitors. There are law enforcement rangers, architects, historians, computer specialists, accountants, engineering, and many more.

We will always need people to care for, protect, and preserve our national parks. You can be one of those helping people!

➡ What type of National Park Service employee or volunteer would you consider being?

➡ What information would you like to know to help you reach your goal of working for a National Park?

Others, or the Park, tell a ranger.

Friday May 28

As you leave Yellowstone National park, we will stop to observe the **Grand Prismatic Hot Spring,** the largest hot spring in the United States.

What do you think is the source

Map of Yellowstone National Park

Yellowstone has five entrances with the main interior road forming a figure "8". You will enter and leave the Park through the south entrance, but we will stay just outside the west

Animal Safety

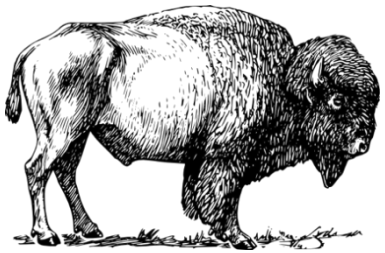
1. Stay at least _____yards from large animals such as bison, elk, and moose

2. Stay at least _____yards from bears and wolves

3. Look, but don't approach animals

4. Do Not F ___ ___ D the animals!

5. Pick up all your crumbs after picnicking!



Yellowstone Mammals

Mammals are animals that have fur and give birth to live young. Put a check mark by the mammals you observed in Yellowstone since arriving on Monday.

___ Bats

___ Beaver

___ Bighorn sheep

___ Bison

___ Chipmunk

___ Coyote

___ Elk

___ Gray wolf

___ Grizzly bear

___ Moose

___ Mountain lion

___ Mule Deer

___ Pronghorn

___ Snowshoe hair

___ Ground squirrel

___ Weasel

___ Western cottontail

___ White-tailed deer

___ Yellow-bellied marmot

Time to Reflect
(Thursday Evening)

Reflect on your experience in Yellowstone today.

What was the most exciting thing you saw or did today?

Describe How it made you feel.

Our first stop on our Yellowstone Adventure is **Old Faithful**, the most famous geyser in the world!

? How do you think that Old Faithful got its name?

? On average how often does Old Faithful erupt? _____

? How long did it erupt? _____

? What did you Hear when it erupted?

? What did you See when it erupted?

? Describe how you felt when it erupted?

Draw a picture of Old Faithful before and during its eruption.

1. Old Faithful before it erupts.

Geothermal Features of Yellowstone

Geysers

Mudpots

Roosevelt Arch

1 The Roosevelt Arch is located at the north entrance of the Park in the town of Gardiner, Montana.

When (what date) was the Arch Built?

Fumaroles or Steam Vents

Hot Springs

Old

If we have time, lets walk around The Upper Geyser Basin board walk.

Time to Reflect

Lunch with a Yellowstone Ranger

What was the Ranger's Name?

Circle the colors you see in the different hot springs and geysers?

Blue	Green	Yellow
Red	Brown	Red
White	Purple	Black

Other colors? _____

Did you notice anything living in any of the hot Springs? If yes, What?

What was the name of your Favorite hot spring or geyser? Why?

(Monday Evening)

Reflect on your experience in Yellowstone today.

- What was the most exciting thing you saw or did today?

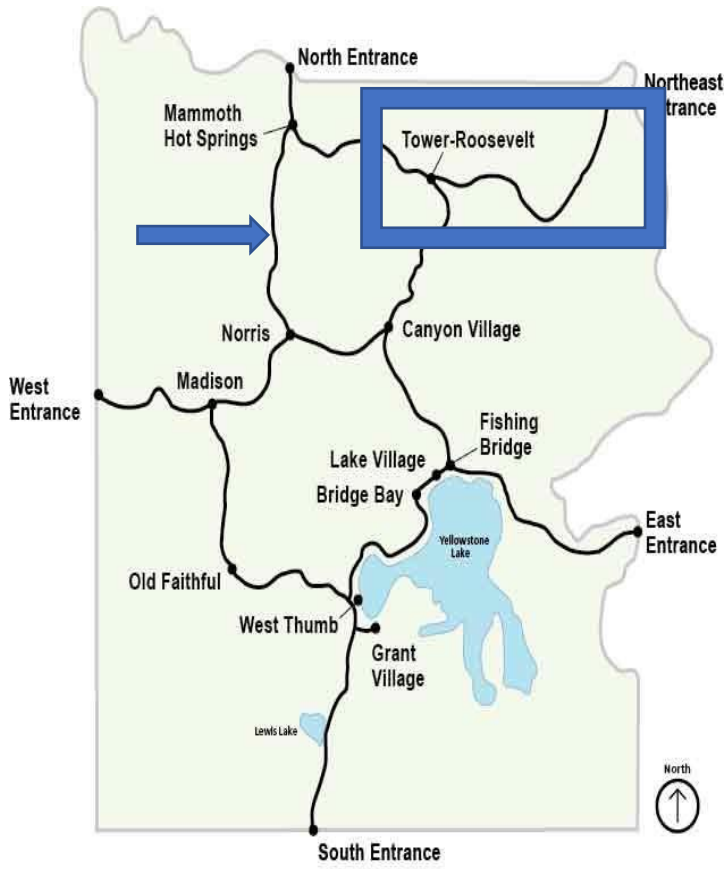
- Describe How it made you feel.

Mammoth Hot Springs is not called "Mammoth" after the ancient elephant-like animal, it is called "Mammoth" because of its size. Hot water saturated with calcium carbonate ($CaCO_3$) comes out of the ground to form the white travertine. Over time, bacteria begin to grow on the travertine giving Mammoth is beautiful colors.

If bacteria grow on the travertine, what accounts for the different colors?

Why do you think that the Mammoth area contains NO geysers? Provide a possible explanation.

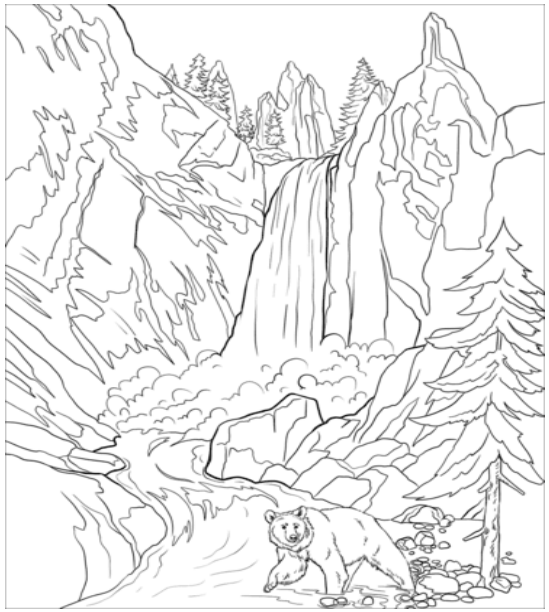
Tuesday May 25th



Today we will spend most of our time in the upper loop, on the east side of Yellowstone. Watch for wildlife on your bus ride to Lamar Valley.

Tower Fall plunges 132-feet to the river below and is framed by eroded volcanic pinnacles.

➡ Why do you think this beautiful water feature is called "Tower Fall" and not "Tower Falls"?



Mammoth Hot Spring Terraces

Circle the colors you see on the Travertine at the Mammoth Hot Spring Terraces.

Blue	Green	Yellow
Red	Brown	Red
White	Purple	Black

Other colors? _____

➡ Did you notice anything living in any of the hot Springs? If yes, What?

➡ What was the name of your Favorite hot spring or geyser? Why?

Thermal Feature	pH	Temperature	Observations & Microbe Identification

Trout Lake in Lamar Valley

You just hiked through Douglas Fir Trees. Now sit along the shore of the lake.

➡ Describe what you **see**.

➡ Close Your eyes and listen to the sounds of nature. Describe what you **hear**?

➡ Did you see any animals at

Lamar Valley Adventure

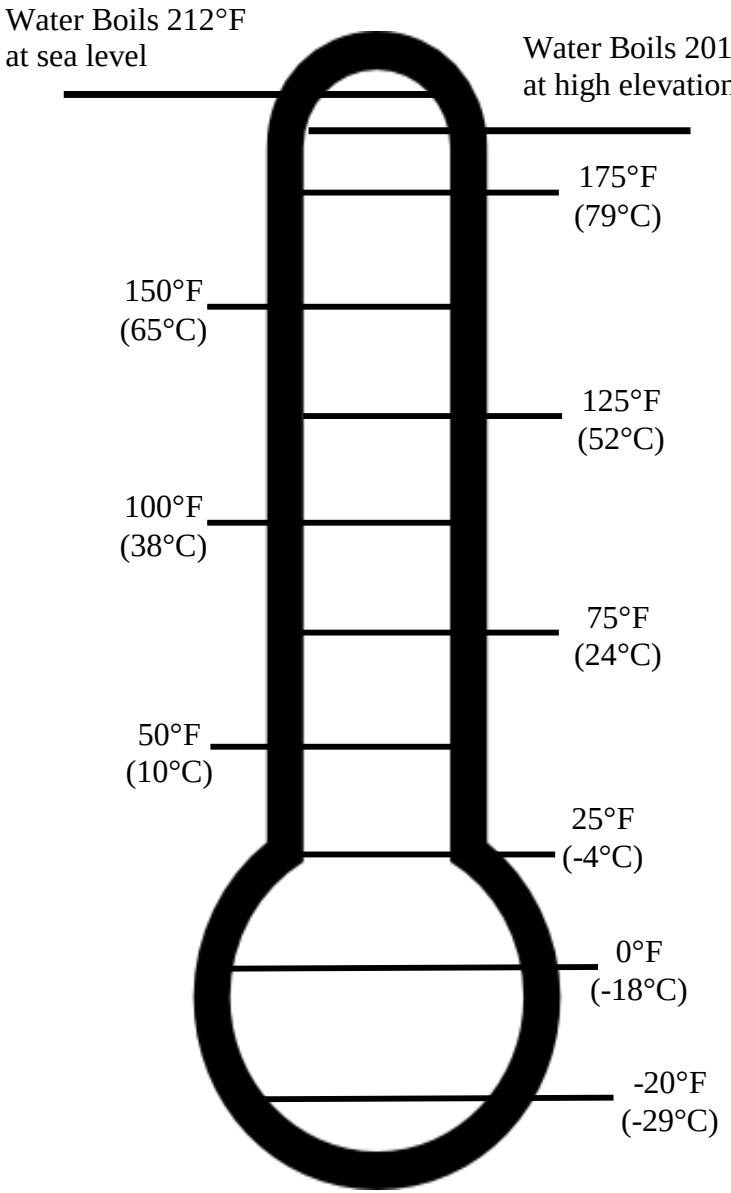
As you drive through Lamar Valley, notice its U-shape. Also notice the large out-of place boulders.

➡ How do you think the Valley got it's shape and/or the boulders got placed where they currently rest?

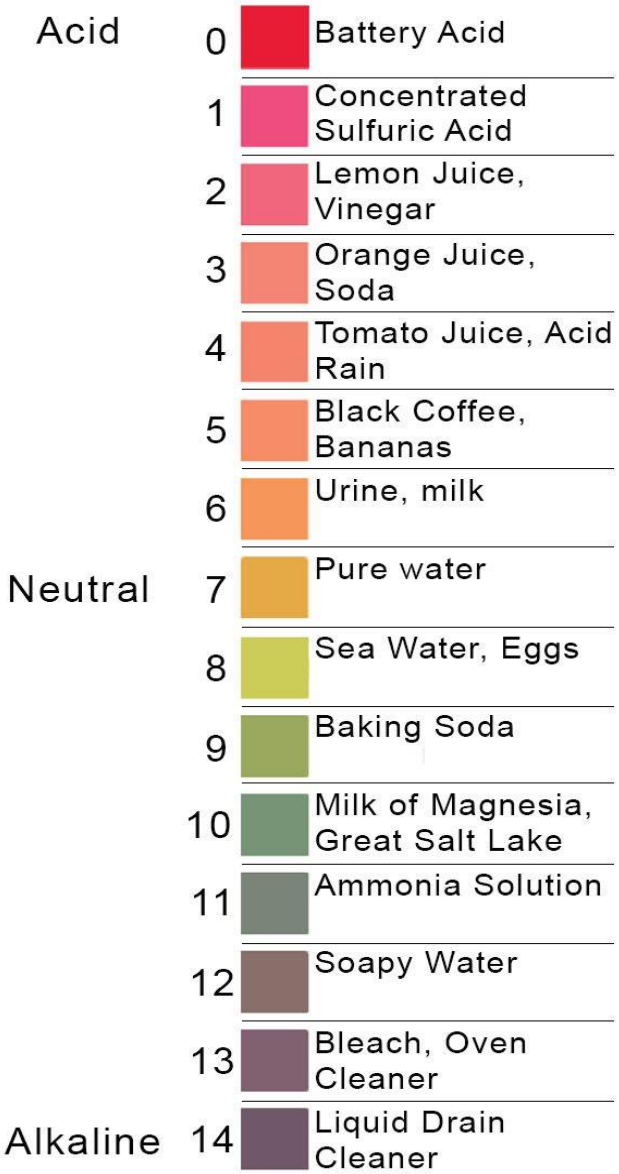
➡ What is a "nurse" rock?

➡ Did you observe any animals in Lamar Valley? List them.

Temperature Conversion Chart



pH Scale



The Petrified Tree

Placed behind a metal fence, this tree allows us to look back into Yellowstone's history. Volcanic debris from the eruption of the Absaroka volcano covered the tree. Then groundwater rich in silica and calcite from volcanic ash seeped in and clogged the hollow tubes that the tree used to transport water.

➡ **Draw** and **Describe** what you see.

Sheepeater Cliff

These magnificent vertical rock pillars formed as basalt lava cooled, shrunk, and cracked creating polygonal pillars. This cliff is named after the Eastern Shoshone, known as *Tukuaduka* (sheep eaters).

➡ Describe how this cliff and others like it were used by Native Americans who called Yellowstone, home.

➡ Draw a picture of the cliff

➡

Guided Ranger Tours

Native American Talk

List two things that you learned from the Ranger Talk that made you say … wow!

Thing One ….

Thing Two …

Did you see any Yellow-bellied marmots?
What sounds does it make?

What other animals did you observe?

Guided Ranger Tours
Hot Springs Talk

List two things that you learned from the Ranger Talk that made you say … wow!

Thing One ….

Thing Two …

Time to Reflect (Tuesday evening)

Reflect on today's Yellowstone experiences.

What was the most exciting thing you saw or did today?

Describe How it made you feel.

National Park Service Symbols

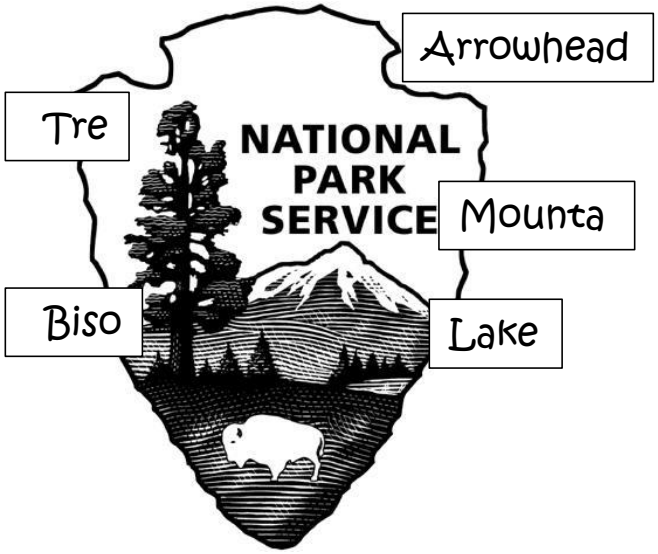
Each element of this symbol represents something that is protected by the National Park Service. Use the words below to fill in the blanks.

We will spend much of the day in the **Mammoth Hot Spring** area (including the Mammoth Terraces).

What thoughts do you have about this area?

What animals have you seen?

Back in the late 1700s – early 1800s,

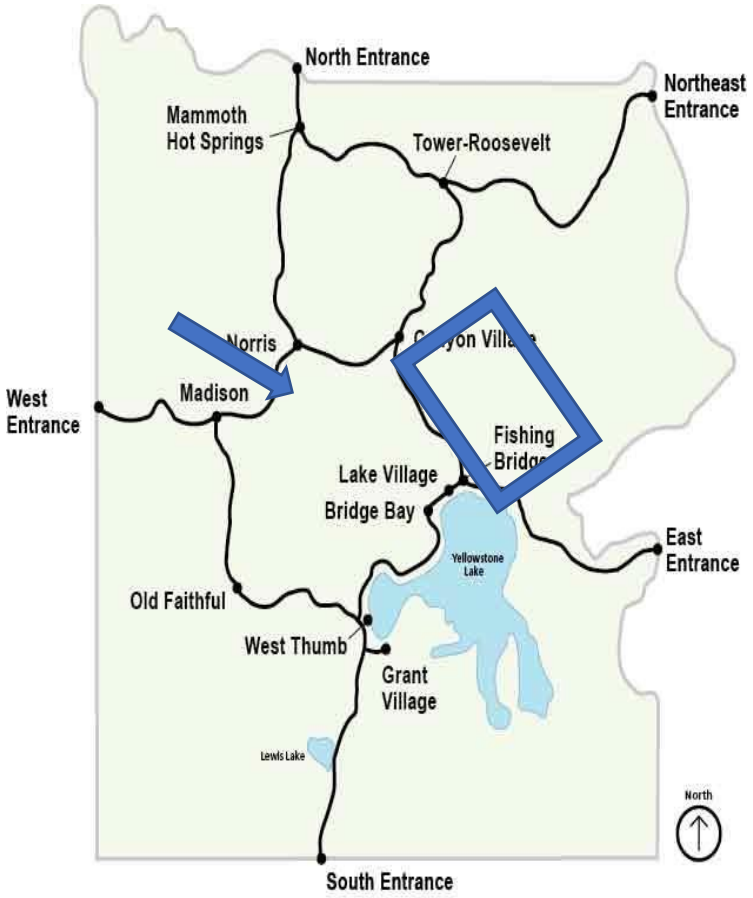


1. The _____ represents wildlife.
2. The _____ represents plants.
3. The _____ represents geology.
4. The _____ represents natural Resources such as water and air.
5. The _____ represents the history of our country.

The weather in Yellowstone can be unpredictable. Visitors are advised to dress in layers. What has the weather been like on your Yellowstone visit?

Monday:

Wednesday May 26



Today we will spend our time exploring the west side of the lower loop of Yellowstone. We will visit the Grand Canyon of the Yellowstone, Mud Volcano, and Hayden Valley.

Grand Canyon of the Yellowstone Lower Falls
5,000–60,000 gallons of water plunge over the lower falls each second.

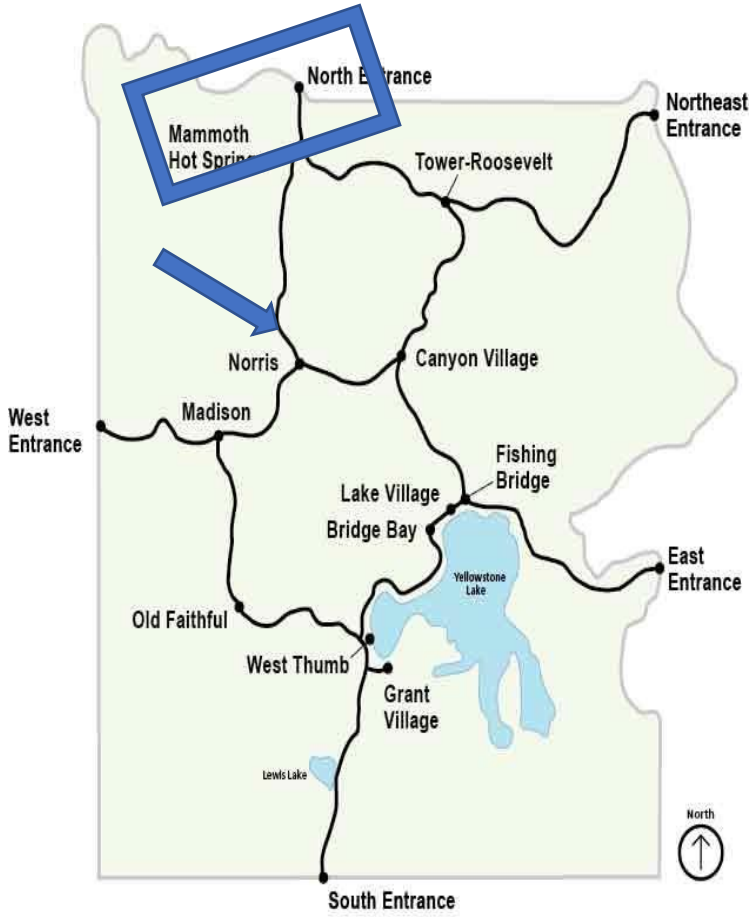
*If we are able to hike down the switch-back to the brink of the lower falls, close your Eyes and "feel" and "listen" to the power of the water.

➡ Explain what you are feeling right now.

Red Rock Point allows us to see the falls from a distance. Look for the rainbow that begins on the right side of the falls.

➡ Explain the science behind a rainbow?

Thursday May 27



Today we will spend our time exploring the northwest side of the upper loop of Yellowstone. We will visit the Mammoth Hot Springs terraces.

Time to Reflect
(Wednesday evening)

Reflect on your experience in Yellowstone today.

- What was the most exciting thing you saw or did today?

- Describe How it made you **feel**.

Mud Volcano Area

Sit and watch a Mudpot

- Describe what you **see**, **Hear** & **Smell**.

- Do all mudpots look and act the same? Explain

- What does the Sulfur Caldron smell like?

Lunch in Hayden Valley

Hayden Valley and Lamar Valley were both created during the Pinedale glaciation. Glaciers advanced and retreated from the Beartooth Plateau. Most of the glacial ice receded about 14,00 years ago.

➡ Look around while you eat. Describe the similarities between Lamar Valley and Hayden Valley.

➡ Why do you think Lamar and Hayden Valleys both have Similar features?

➡ Did you observe any animals while

South Rim of the Grand Canyon of the Yellowstone

Whether you are looking at the Lower Falls from Uncle Tom's Trail or from Artist Point, the view is spectacular.

➡ Describe what you see.

➡ Describe the colors of the canyon walls.

you ate your lunch? List them.