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.

You will participate in a guided education tour dedicated to teaching the students from Bluejacket, OK about the natural wonders of Yellowstone National Park.
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 of the spring’s beautiful colors?

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 entrance.
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
___ Ground squirrel
___ Gray wolf
___ Mule Deer
___ Mountain lion
___ Pronghorn
___ Snowshoe hair
___ Western cottontail
___ White-tailed deer
___ Yellow-bellied marmot
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? _________**

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**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.

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

? On average how often does Old Faithful erupt? _____

? How long did it erupt? _________
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

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?

If we have time, let's walk around The Upper Geyser Basin board walk.
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?

What was the Ranger’s Name?
(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 its 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.

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?
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 its 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.

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**Temperature Conversion Chart**

<table>
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<th>Celsius</th>
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</thead>
<tbody>
<tr>
<td>212°F</td>
<td>100°C</td>
</tr>
<tr>
<td>201°F</td>
<td>93°C</td>
</tr>
<tr>
<td>175°F</td>
<td>79°C</td>
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<tr>
<td>0°F</td>
<td>-18°C</td>
</tr>
<tr>
<td>-20°F</td>
<td>-29°C</td>
</tr>
</tbody>
</table>

Water Boils 212°F at sea level

Water Boils 201°F at high elevations
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).

Guided Ranger Tours
Native American Talk
List two things that you learned from the Ranger Talk that made you say ... wow!

Thing One ....

Draw a picture of the cliff

Thing Two ...

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

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.

Thing Two ...
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:
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?

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

Sit and watch a Mudpot

Describe what you see, Hear & Smell.

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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.

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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 14,000 years ago.

Look around while you eat.

Describe the similarities between Lamar Valley and Hayden Valley.

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**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.

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Describe the colors of the canyon walls.

Did you observe any animals while
you ate your lunch? List them.