



Junior Ranger



What is a Junior Ranger?

Welcome to Colorado National Monument!
A colorful land of desert canyons and rock formations awaits you. As a junior ranger, you will have three important jobs...

1. **Explore** Colorado National Monument.
2. **Learn** why it is a special place.
3. **Protect** its plants, animals, rocks & history.



Become a Junior Ranger

If you are up for the challenge, here's how to earn your badge!

- ☐ 1. Find the animal picture for your age. Give your animal a name: _____.

- ☐ 2. Look for pages that have your animal at the top of the page and complete those activities.

- ☐ 3. Get out there. Take a hike!
or...

Go to a ranger program (schedules at the visitor center and www.nps.gov/colm).

- ☐ 4. You did it! Go to the visitor center and show your work to a ranger to get your official junior ranger badge.



Ages 7 & Under

Complete at
least 3 activities



Ages 8-10

Complete at
least 5 activities



Ages 10 & Up

Complete at
least 7 activities

Protect your Park



Put an X through the activities that are not allowed in the monument and circle the activities that help protect it.



What did you do to help protect the monument during your visit?

- ☐ stayed on trails
- ☐ watched animals from a safe distance
- ☐ left everything where I found it
- ☐ looked at rocks and trees, but didn't carve or mark on them

- ☐ respected other visitors
- ☐ picked up trash

What else did you do?

Explore - Take a Hike!



Hiker's Checklist

- ☐ 1. Plan your hike using the park map.
- ☐ 2. To make your hike safe, draw a line from the items you will need to the backpack. Cross out the items you won't need.



- ☐ 3. Load your pack and let someone know your plan before you go.
- ☐ 4. Fill out the trail report for one of your hikes.

Explore - Trail Report



Trail Name: _____

Date: _____ Time: _____

Distance: _____

Terrain (circle the description(s) that apply):

Rocky Sandy Flat Steep Snow covered Rough

Weather (circle one):

Sunny Cloudy Windy Hot Cold Rainy Snowy

Describe or draw what you liked most about this hike:

Learn - Be a Geologist



The canyons are made of many layers of rocks. In Colorado National Monument, you can find the oldest rocks at the bottoms of the canyons, while the youngest are at the tops. Geologists make drawings called stratigraphic columns to show the different rock layers in an area. Each layer has a pattern to show what type of rock it is made of.

Use the clues and the key below to fill in the layers in the stratigraphic column of the monument. You will use one rock type more than once.



The **Morrison Formation** is famous for its fossils. It formed from rivers, lakes and floodplains that covered the area.

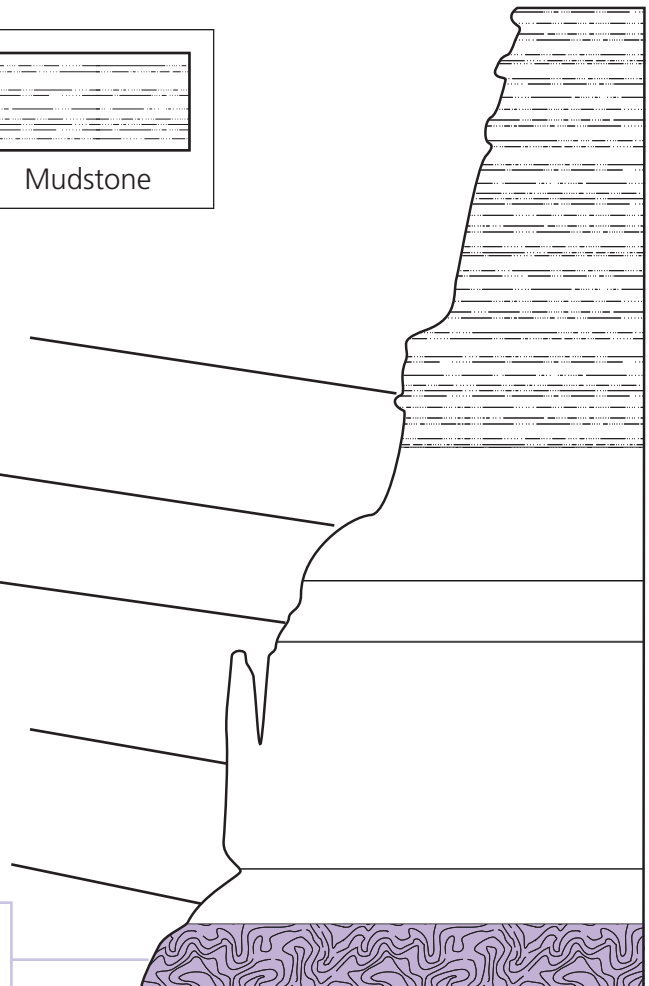
A giant desert covered the area when the **Entrada Formation** was deposited.

The **Kayenta Formation** formed in river bottoms.

The **Wingate Sandstone** was deposited in a desert like the Sahara.

The **Chinle** formed in a muddy swamp.

Bonus! Go to the visitor center exhibits to learn about the Precambrian formation, the oldest rocks in the monument.



Learn - The Wear-Away Forces



Weathering (rocks breaking) and **erosion** (rocks moving) are the two never-ending forces that wear away the land and carve canyons and rock formations.

Follow the instructions below to discover the agents of weathering and erosion hidden in the boxes.

- 1. Cross out all the words that rhyme with need.
- 2. Put an X on all the words ending in the letter “t”.
- 3. Circle all the landforms.
- 4. Fill in the blanks below with the remaining words.

| | | | | | |
|----------|----------|---------|---------|----------|---------|
| right | seed | thawing | left | cliff | gravity |
| mountain | freezing | feed | sun | night | pet |
| valley | rain | mesa | streams | read | meat |
| wind | out | roots | bead | canyon | floods |
| plateau | snow | ice | eat | monolith | humans |

1. _____

2. _____

3. _____

4. _____
5. _____

6. _____

7. _____

8. _____
9. _____

10. _____

11. _____

12. _____

Bonus! Write an **E** next to agents of erosion and a **W** next to agents of weathering.

Learn - Wild Ways

Follow the tracks to find your way out of the canyon. Select the correct animal tracks based on the clue.

(If you choose the wrong tracks they will fade away.)

START

Clue: "I pant like a dog to stay cool."

Whiptail Lizard



Desert Bighorn Sheep



Desert Cottontail



Bushy-tailed Woodrat



Clue: "My big ears release heat to help me regulate body temperature."

Clue: "My skin absorbs water from the soil."

Red-spotted Toad



Black-tailed Jackrabbit



Clue: "I am an omnivore, so I eat plants and animals."

Bobcat



Striped Skunk





Clue: "I eat only plants, I am an herbivore."

Coyote



Mule Deer



Clue: "I eat carrion (dead animals). I am a scavenger."

Chipmunk



Turkey Vulture



Peregrine Falcon



Swift



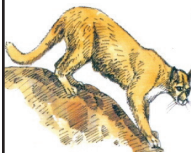
Clue: "I dive from canyon rims as fast as 200 mph to capture prey, like smaller birds or rodents."

Clue: "I am a fierce predator and defend my territory. I hunt at night, stalking my prey."

Gray Fox



Mountain Lion



FINISH

Learn - Living Soil

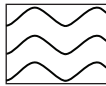
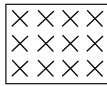
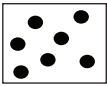


Biological soil crust is the black, bumpy soil along the sides of the trails. It creates a web that binds the soil and holds water in, allowing plants to take root. Biological means “living”... so our soil is alive, but fragile. Help us protect this important crust by staying on the trails!



Use the key below to fill in the layers of the biological soil crust.

1. Bacteria 2. Algae 3. Lichen 4. Fungus

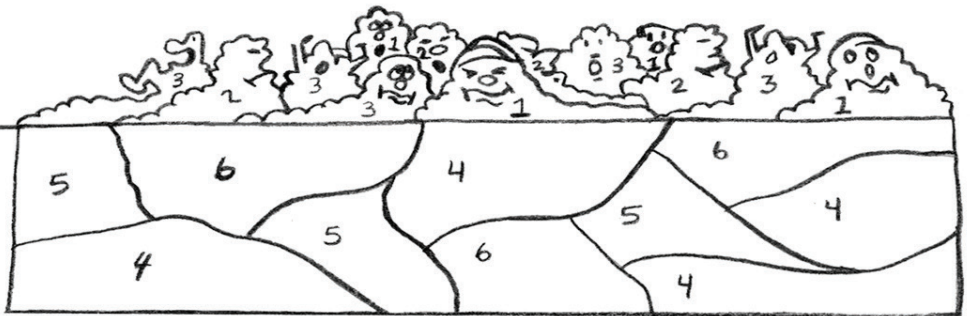


5. Moss
6. Cyanobacteria
(bacteria with chlorophyll)



Above Ground

Underground





Bonus! Find biological soil crust along a trail in the monument and pour a little water on it. What happens to the color of the crust?

Explore - Meet the Plants



Hot summers, cold winters, little water and a scorching sun make the desert a harsh place for plants. How do these hardy plants survive and grow? They have special adaptations that help them stay cool and capture and conserve water.

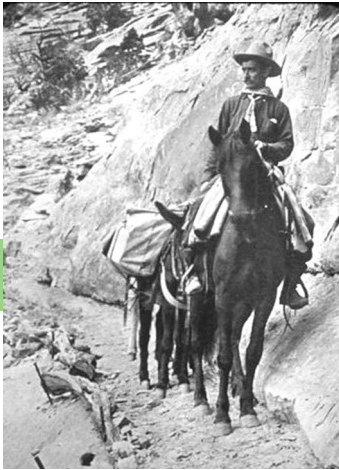
Use the native plant gardens around the visitor center to find and draw five of the plants listed below.

| | | | |
|---|---|--|---|
| Paintbrush  My leaves have tiny hairs to catch water and reflect light. | Rabbitbrush Every part of me is colorful, from pastel green stems to bold yellow flowers. | Yucca My sharp leaves grow in a spiral to help water flow to my base. | Mormon Tea Instead of leaves, I make my food in my stems. |
| Prickly Pear Cactus My thick pads help store water, and my sharp spines protect me from animals. | Big Sagebrush The strong scent in my leaves keeps hungry animals away. | Showy Four-O'clock To save water, I close my beautiful purple blossoms in the hottest part of the day. | Pinyon Pine My needles point up to expose less area to the sun. |
| Single Leaf Ash The waxy coating on my leaves keeps water in and reflects light. | Cliffrose My tiny leaves help me use less energy and water than the other plants. | Utah Juniper  My waxy berries protect my seeds and allow less water to escape. | Fish-hook Cactus My pleats allow me to swell when I am full of water and shrink when I get thirsty. |

Learn - Otto's Dream



In 1905, John Otto began working in the canyons, building trails and taking people on hikes. He called himself a “booster” and wrote letters to government officials, including the president, telling them about these amazing canyons. Thanks to Otto, Colorado National Monument was established in 1911.



Crack the code to learn more about John Otto.

▼ 🏆 🌐 🌲 🌴 🕶️ 🦋 🚫🕷️ 🏠 🔑 🔍 🚲 🚌
A C D E F G I L N O P R S T

1. After the monument was established in 1911, Otto was paid \$1 a month to take care of the monument as its first _____.

🔍 ▼ 🕷️ 🕶️ 🌲 🔍

2. Otto lived in a _____ and built over 20 miles of _____.

🚌 🌲 🕷️ 🚌

🚌 🔍 ▼ 🦋 🚫🕷️ 🚲

3. To celebrate the 4th of July, Otto raised the American flag on the top of _____ Monument.

🦋 🕷️ 🌐 🌲 🔑 🌲 🕷️ 🌐 🌲 🕷️ 🏆 🌲

Bonus! John Otto showed us that one person can make a difference. Think of ways you can make a difference in your community, school, or friend groups.

- _____
- _____
- _____

Learn - Living off the Land



Long before the wagon trains made their way out west, Indigenous peoples like the Ute and the Fremont have lived in this arid region. They have been masters at using plants for food, medicine, clothing, tools, shelter and everything else they need. When you go home, talk about the plants that you use in your everyday life with your family.

Unscramble the plant names below, then find them in the puzzle.

| | | | | | | | |
|--------|-------|---------|-------|-----------|------|--------|-----------|
| willow | sumac | juniper | yucca | sagebrush | pine | mormon | ricegrass |
|--------|-------|---------|-------|-----------|------|--------|-----------|

1. Indigenous people make baskets from the wood of **usamc** _ _ _ m _ _ _.

2. **nomrmo** _ _ _ m _ _ _ tea is boiled to make a drink to treat colds.

3. Rope is made from the inner bark of Utah **njpirue** _ _ _ i _ _ _.

4. Pinyon **pnei** _ _ _ _ nuts are harvested in the fall to eat during the winter.

5. **ecgrsirsa** _ _ _ e _ _ _ s _ _ seeds are ground into flour or eaten as cereal.

6. **cycua** _ _ _ c _ _ _ fruits and flowers are eaten raw, and the roots are used for shampoo.

7. **ilwolw** _ _ _ _ _ branches are perfect for making bows and arrows.

8. Indigenous people weave cloth from the bark of **basgerhus** _ _ _ g _ _ b _ _ _ _.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| H | W | Y | P | U | W | P | R | S |
| V | S | I | U | O | O | P | E | U |
| U | N | U | L | C | I | Y | P | M |
| E | C | L | R | O | C | R | I | A |
| J | I | Y | C | B | G | A | N | C |
| W | G | H | F | Q | E | B | U | K |
| M | O | R | M | O | N | G | J | K |
| O | E | T | S | U | E | A | A | K |
| T | L | Q | I | V | X | O | B | S |
| S | S | A | R | G | E | C | I | R |
| M | X | C | V | W | R | H | D | T |
| S | C | E | P | Q | I | V | T | B |
| N | V | D | C | E | B | C | O | D |

Protect this Land Forever



The National Park Service (NPS) protects over 400 special sites around the country. Each site protects important natural and cultural resources. This arrowhead is the symbol of the NPS. Each picture inside the arrowhead represents resources protected at NPS sites.



Unscramble the words below to find out what each picture stands for.



kcros

The mountain is the symbol for landforms and _____.



tawre

The lake depicts the _____ resources and opportunities for recreation.



ldwifeli

The bison symbolizes the animals, or _____.



itohsry

The shape of the arrowhead stands for the _____ of the United States.

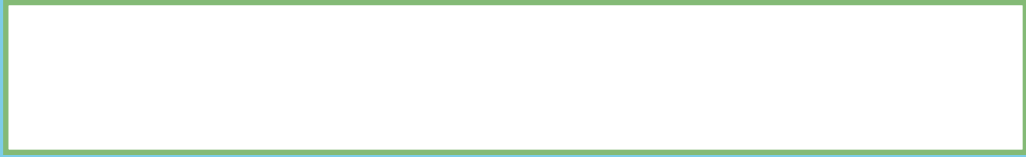


lpatns

The tree represents the vegetation, or _____.

Bonus! Have you visited any other National Park Service sites? If so which ones have you been to?

Congratulations!



You are an official Junior Ranger at
Colorado National Monument!

Park Official Signature





This Junior Ranger booklet was funded by the Colorado National Monument Association (CNMA), a nonprofit organization that supports interpretive and educational programs at Colorado National Monument. To become a member of CNMA visit www.coloradonma.org.

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