



# 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](http://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?

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# 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.

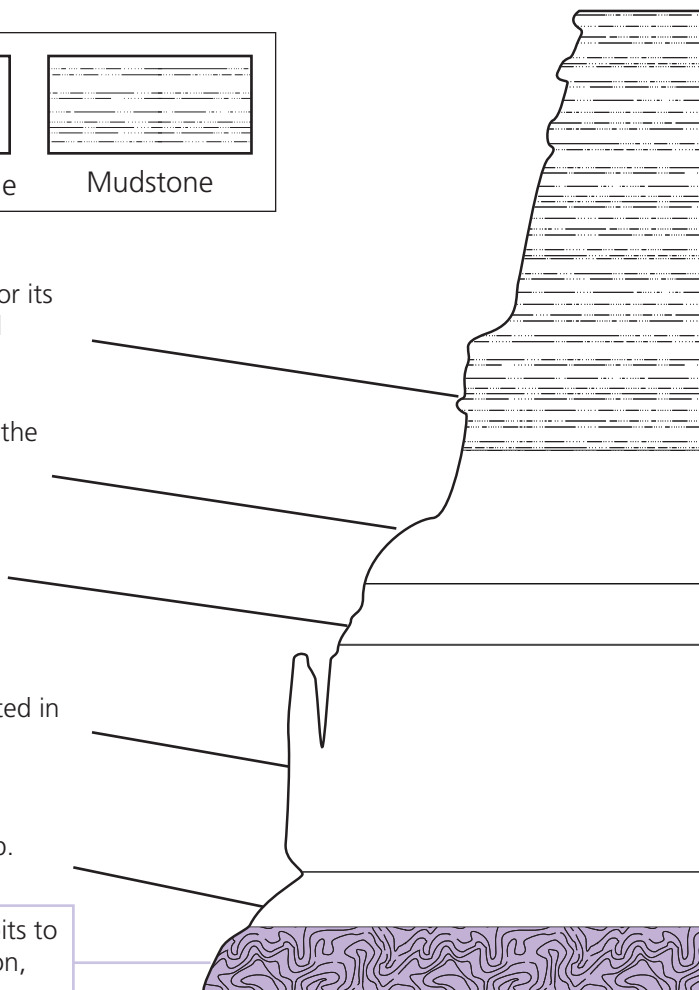
A giant desert covered the area when the **Entrada Formation** was deposited.

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

Bobcat

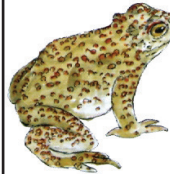


Striped Skunk



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

Red-spotted Toad



Black-tailed Jackrabbit







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

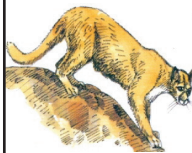


Clue: "I am a fierce predator and defend my territory. I hunt at night, stalking my prey."

Gray Fox



Mountain Lion



Peregrine Falcon



Swift



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

FINISH

# Learn - Living Soil

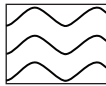
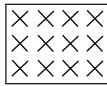
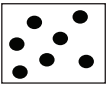


Biological soil crust is the black, bumpy soil along the sides of the trails. It creates a web that binds the soil and holds water in, allowing plants to take root. Biological means "living"... so our soil is alive, but fragile. Help us protect this important crust by staying on the trails!

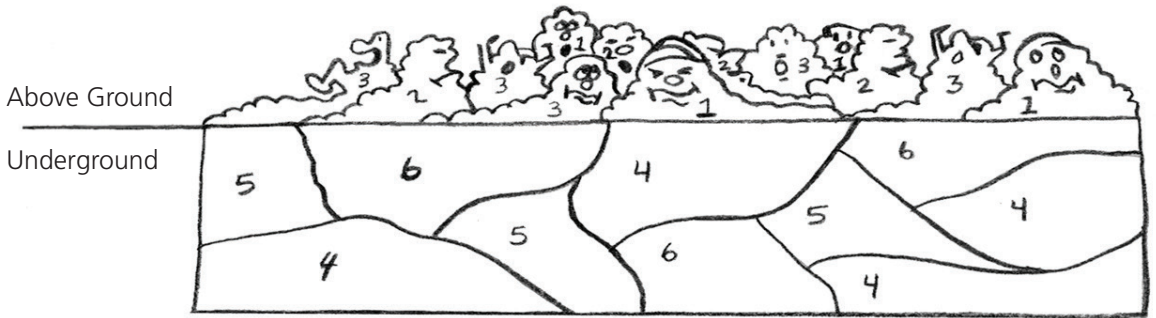


Use the key below to fill in the layers of the biological soil crust.

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



- 5. Moss
- 6. Cyanobacteria  
(bacteria with chlorophyll)





**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.

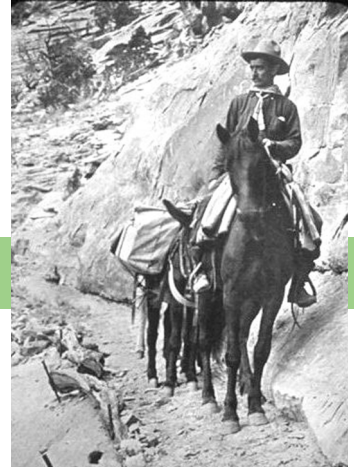
Use the native plant gardens around the visitor center to find and draw five of the plants listed below.

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

# 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.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

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

H W Y P U W P R S

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

V S I U O O P E U

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

U N U L C I Y P M

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

E C L R O C R I A

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

J I Y C B G A N C

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

W G H F Q E B U K

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

M O R M O N G J K

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

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.



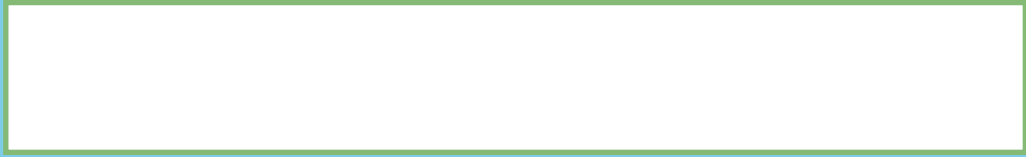
lpatns

The tree represents the vegetation, or \_\_\_\_\_.

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

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# *Congratulations!*



You are an official Junior Ranger at  
Colorado National Monument!

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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](http://www.coloradonma.org).

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