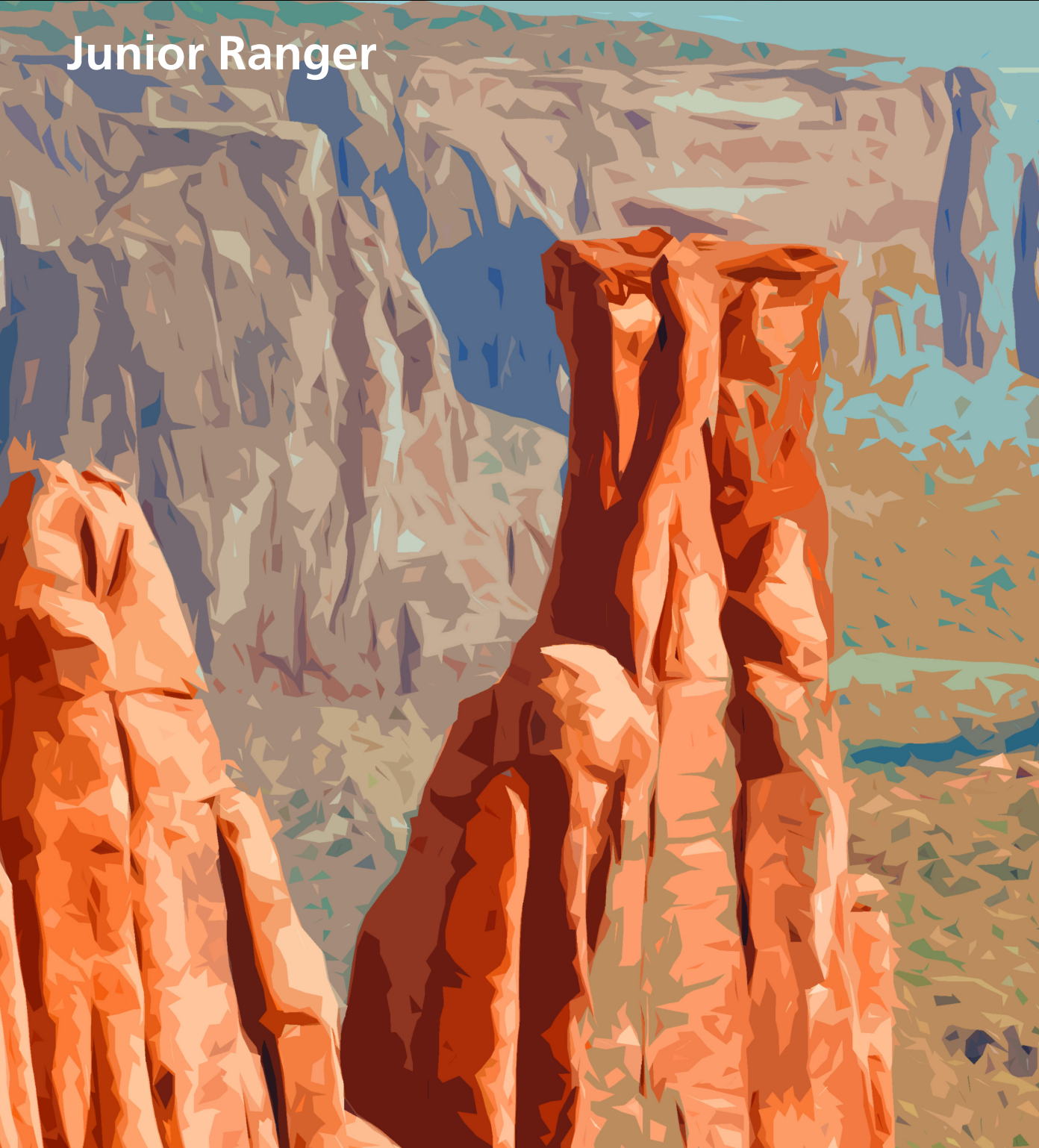


**Colorado**  
National Monument

National Park Service  
U.S. Department of the Interior



# 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: \_\_\_\_\_.



**7 & under**  
Complete at  
least 3 activities

2. Look for your animal in the green bands and do those activities.



**8-10**  
Complete at  
least 5 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)).



**Over 10**  
Complete at  
least 7 activities

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

# 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, 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

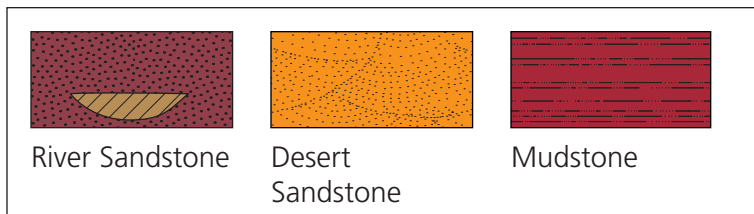
Describe or draw what you liked most about this hike

# 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.



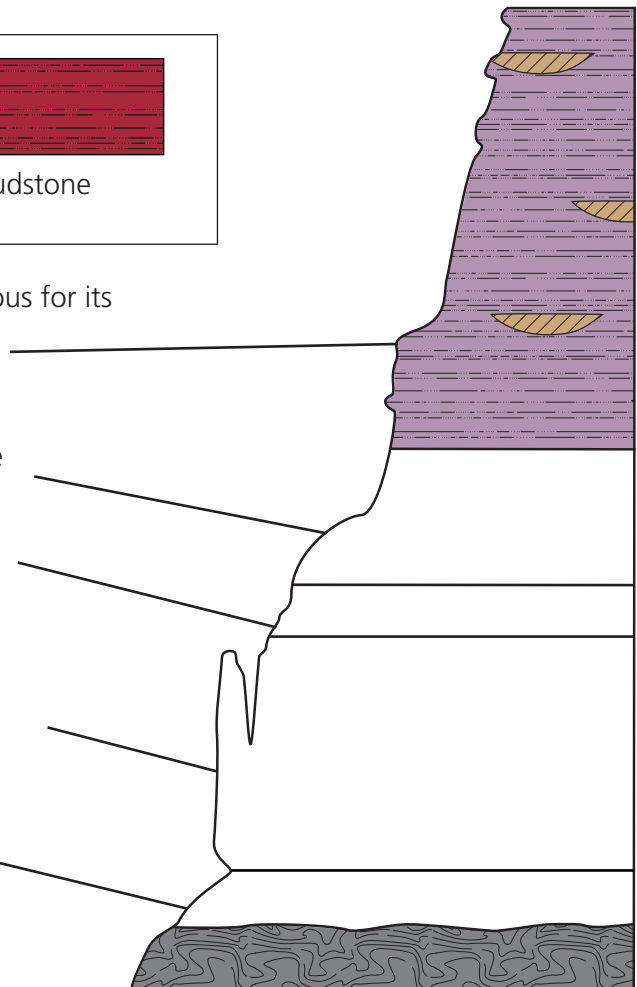
Example: The Morrison Formation is famous for its fossils. It formed from rivers, lakes and floodplains that covered the area

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!** Learn about the oldest rocks in the monument in the visitor center exhibits.

# 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 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

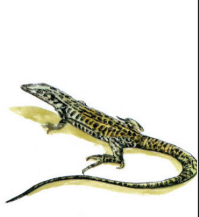
Use the clues to choose which tracks to follow out of the canyon.

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

Start

I pant like a dog to stay cool.

Whiptail Lizard



Desert Bighorn Sheep



Desert Cottontail



Bushy-tailed Woodrat



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

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

Bobcat



Striped Skunk



My skin absorbs water from the soil.

Red-spotted Toad



Black-tailed Jackrabbit







I eat only plants, I am an herbivore.

Coyote



Mule Deer



Peregrine Falcon



Swift



I eat carrion (dead animals). I am a scavenger.

Chipmunk



Turkey Vulture

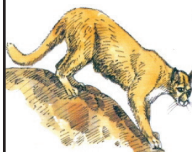


I am a fierce predator and defend my territory. I hunt at night, stalking my prey.

Gray Fox



Mountain Lion



Finish

# Learn - Living Soil



Biological soil crust is the black, bumpy soil along the sides of the trail. 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!

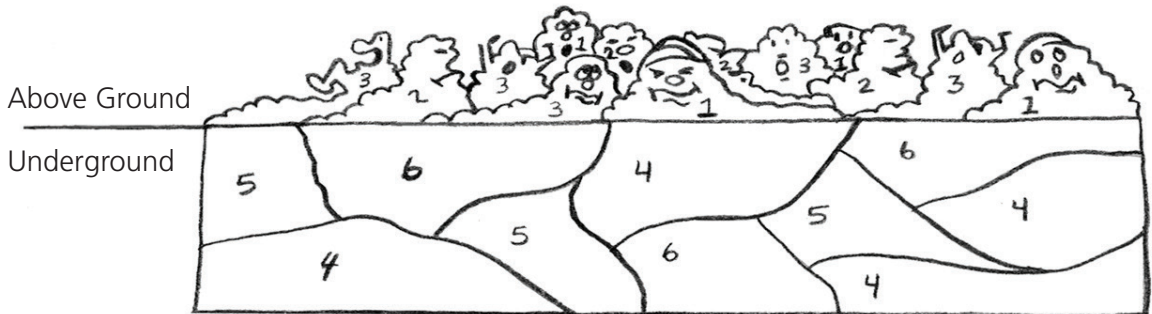
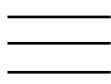


Using the numbers as a guide, draw the patterns in the biological soil crust.

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



- 5. Bacteria
- 6. Cyanobacteria





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

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

# Learn - Living off the Land



Long before the wagon trains made their way out west, native people like the Utes and Fremont occupied this arid region. They are 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.

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

## history

willow      sumac      juniper      yucca      sagebrush      pine      mormon      ricegrass

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

H W Y P U W P R S

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

V S I U O O P E U

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

U N U L C I Y P M

E C L R O C R I A

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

J I Y C B G A N C

W G H F Q E B U K

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

M O R M O N G J K

O E T S U E A A K

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

T L Q I V X O B S

S S A R G E C I R

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

M X C V W R H D T

S C E P Q I V T B

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

N V D C E B C O D

JUNIPER  
 RICEGRASS  
 WILLOW

MORMON  
 SAGEBRUSH  
 YUCCA

P  
 S

# Protect this Land Forever



The National Park Service (NPS) protects over 420 special sites around the country. Each site protects important natural and cultural resources. The 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 \_\_\_\_\_ and archaeological resources.



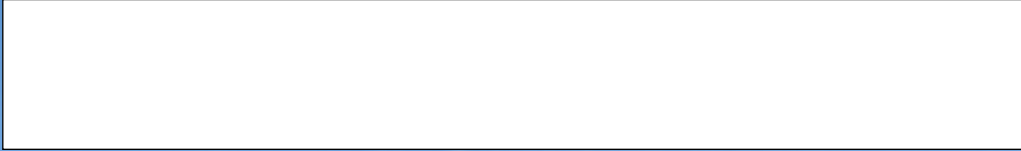
lpatns

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

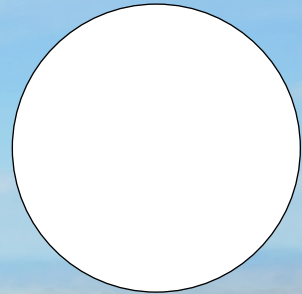
**Bonus!** What other National Park Service sites have you been to?

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Congratulations!



You are an official Junior Ranger at  
Colorado National Monument!



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Park Official



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