

# Timpanogos Cave National Monument

## Junior Ranger Activity Book



# How to Become a Junior Ranger!

As a Junior Ranger at Timpanogos Cave, you can help Park Rangers protect the caves and the land around them. To become a Junior Ranger you must attend a ranger-led program, earn enough points for your age group, then have a ranger check your book with you, swear you in, and sign your certificate.

Every activity is worth 1-3 points. Points look like this:



When you complete an activity, cross out the points.

Like this:



Ages **4-9 (Grades K-3)** need **10** points or more.

Ages **10-12 (Grades 4-6)** need **20** points or more.

Ages **13+ (Grades 7+)** need **30** points or more.

## Checklist:

- Attend a ranger-led program. 
- Earn enough points for your age group.
- Have the book checked and be sworn in by a ranger.

Unable to finish this booklet during your visit? Take it home, complete the activities, and mail it back to:

Timpanogos Cave National Monument  
Rural Route 3, Box 200  
American Fork, Utah 84003  
801-756-5239  
[www.nps.gov/tica](http://www.nps.gov/tica)

Special thanks to: Marsha Phillips, Heather Graham, and the Bureau of Land Management.

# About you!



My name is: \_\_\_\_\_

I am from: \_\_\_\_\_

I have earned \_\_\_\_\_ other Junior Ranger Badges.

I am \_\_\_\_\_ years old.

At this park, I am most excited about: \_\_\_\_\_

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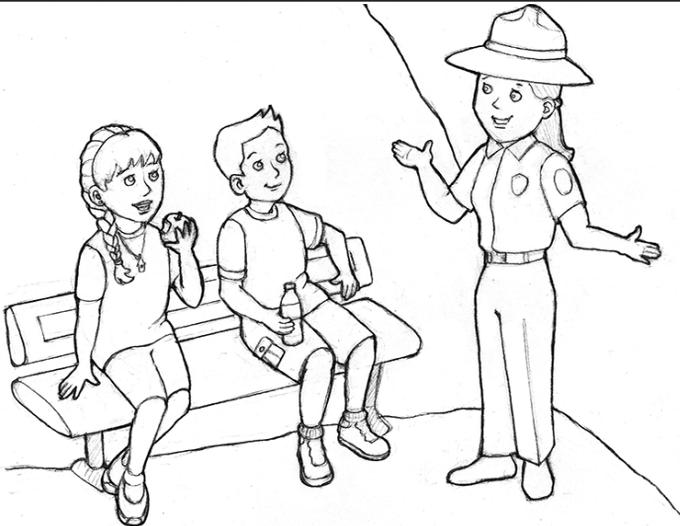
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I want to learn about: \_\_\_\_\_

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# Junior Ranger Responsibilities



Junior Rangers have the responsibility to help protect National Parks. See if you can figure out how to handle these tricky situations below. Circle the right answer.

**Your friend, who is hiking to the cave with you, wants to race up the trail! You:**



1. Take off running. You know you can beat him.
2. Remind them that running on the trail is not safe, and you're supposed to stay near the adults who brought you.
3. Decide to show off and take off running backwards up the trail.

**While snacking along the trail a cute little chipmunk starts begging for your food. You:**

1. Share your sandwich with the chipmunk. There is more than enough for both of you.
2. Watch him scamper around, but don't feed him. People food isn't healthy for wild animals.
3. Take the chipmunk home as a pet, prepare him meals in the kitchen and make sure he is always well fed.



**You are packing your backpack before you begin the hike up to the cave. You decide to bring:**

1. Lots of toys, a skateboard to ride down on, a jacket, and your pet lizard.
2. Nothing. Even though the cave is cold and the trail is often very hot you decide you don't want to carry anything.
3. A jacket, water bottle, your Junior Ranger book, and a snack for the trail.



**The spring flowers have begun to bloom and they're so very pretty and growing everywhere! You:**



1. Look at them - but don't pick them. You take a picture and then leave them alone so other people can enjoy them.
2. You stomp them down to make a new hiking path.
3. Pick a whole bunch of flowers to take home and give to your parents.

# Interview a Ranger



Find a ranger and ask three questions. You can come up with your own or you can choose from the examples below.

1. What's your favorite thing to do as part of your job?
2. Why did you decide to become a park ranger?
3. What's the most important thing you bring to work?
4. Where is your favorite place at Timpanogos Cave?
5. How can we help protect bats? Why is it important?
6. Why is it important for everyone to protect the caves?

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# Understanding the Arrowhead



The arrowhead is the symbol of the National Park Service. It is made up of many different pieces that represent something that the National Park Service protects. Can you figure out what each one is?



The \_\_\_\_\_ represents wildlife

The \_\_\_\_\_ represents plants

The \_\_\_\_\_ represents water

The \_\_\_\_\_ represents the beautiful scenery

The \_\_\_\_\_ represents our nation's cultural history

# Discovery Bingo



Find as many of the things listed here as you can. Draw pictures of the items that you find that don't already have pictures. See if you can find four in a row to make a bingo!

Ranger Hat 	Stalactite	Water	Coral Fossil 
Squirrel	Lizard	Arrowhead 	American Flag
Fir Tree	Steller's Jay 	Flowstone	Park Ranger 
1/4 Way Arch	Soda Straws	The Great Heart 	Chipmunk 

# Who am I? - People in Timpanogos History



1. I discovered the first cave in 1887 by following mountain lion tracks on a snowy October day.



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2. We were hunting in American Fork Canyon and discovered Middle cave in 1921.



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3. We were two teenage boys who first discovered Timpanogos Cave in 1913. However, the location was eventually lost again.



4. A group of my friends and I went exploring for the missing cave in August of 1921 and rediscovered the cave. We all agreed to try our best to protect this cave.



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5. I was the president of the United States who signed the proclamation to create Timpanogos Cave National Monument on October 14, 1922.



Martin Hansen

Vearl Manwill

Wayne & Heber Hansen

Warren G. Harding

James Gough & Frank Johnson



# Sit & Reflect



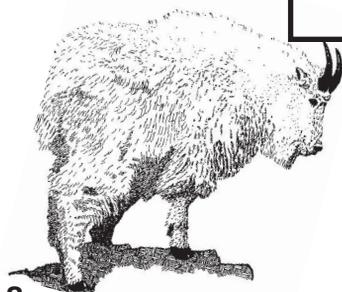
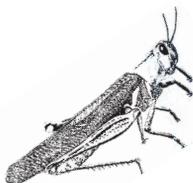
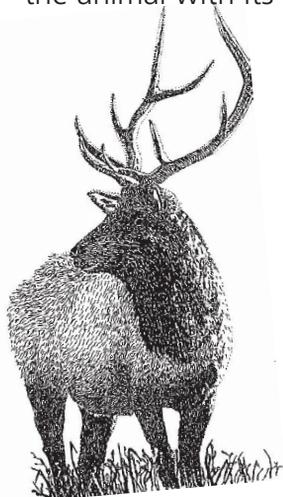
Find a spot to sit quietly by yourself. Try sitting without saying anything for 5 minutes. Think about the experiences you've had here. What did you hear? What did you see? What did you feel? Draw a picture or write about your experiences and what makes Timpanogos Cave a special place worth protecting.



# Animal Match



These are some of the animals that can be found here. While visiting the park look for these and other animals. Can you match the animal with its name? Draw a line from the animal to its name.



Cave Cricket

Mountain Lion

Humming Bird

Golden-Mantled Squirrel

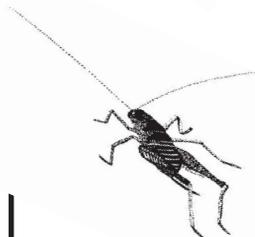
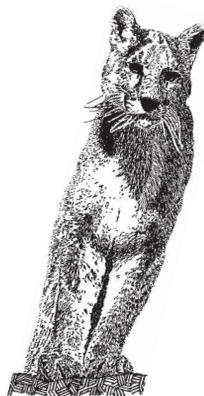
Mountain Goat

Rattlesnake

Grasshopper

Elk

Peregrine Falcon



# Fix the Sign



Oh no! Ranger Andy's new bat sign fell down and now some of the words are mixed up on the ground. Help Ranger Andy by putting the words back in their right place.

## Bats in Crisis



White-\_\_\_\_\_ Syndrome (WNS) has killed more than 6.7 \_\_\_\_\_ bats in the United States and Canada. WNS can spread from bat-to-bat, or soil to bat.

Your \_\_\_\_\_ is needed!

Stay out of \_\_\_\_\_ and \_\_\_\_\_ where bats are hibernating.

Wear different \_\_\_\_\_ and bring different equipment to each cave you visit.

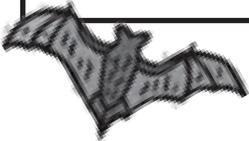
Honor cave closures. Check with your state and federal \_\_\_\_\_ for the status of caves in your area.

Report bats \_\_\_\_\_ signs of WNS.

Bats help control \_\_\_\_\_ populations. A little brown bat can catch 600 insects in just one hour.

Bats also help \_\_\_\_\_ plants, like bananas and figs.

Help \_\_\_\_\_ the word about WNS and the \_\_\_\_\_ of bats.



pollinate      help      showing      clothes      mines      agencies  
caves      spread      Nose      value      insect  
million

# What Lives in a Cave?



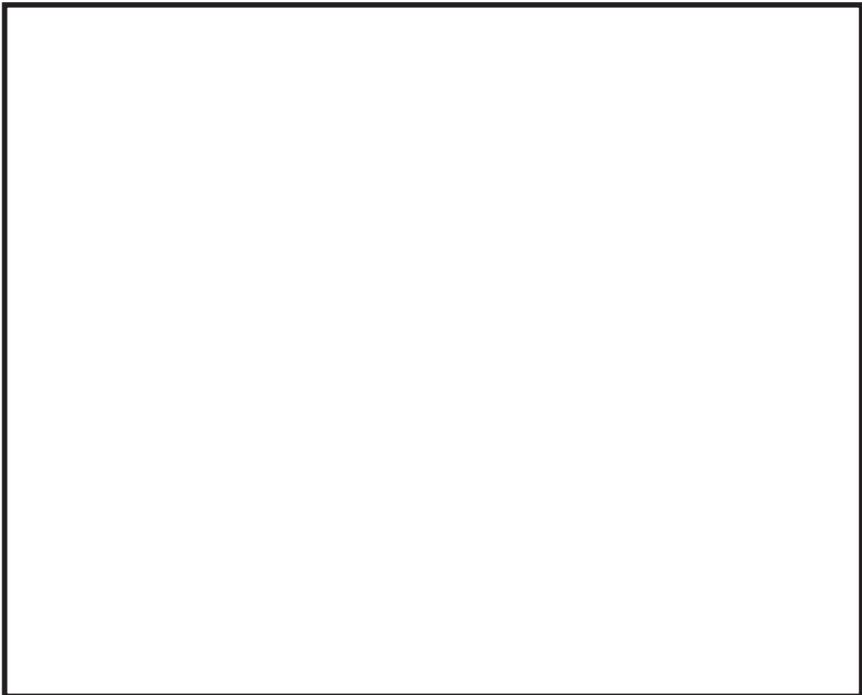
An adaptation is a special trait which a living thing possesses to help it survive in a particular environment.

- Fish have gills that allow them to breathe oxygen from water.
- Bears have excellent noses, so they can smell and find food.
- Chameleons can change color.
- Limber pine trees have flexible branches, which bend without breaking under the weight of winter snow.

Now imagine a creature which lives in a cave. Use the list below to remind you of what it's like in a cave. Give your creature some adaptations which will help them survive in a cave.

- Timpanogos Cave's temperature is 45° F (7° C) all year long.
- No sunlight reaches deep inside; it is completely dark.
- Water from rain soaks into the ground and drips into the cave.
- Finding food is difficult. Plants are only found outside of the cave.

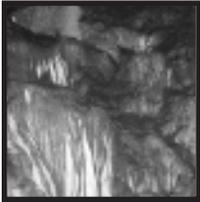
Draw your creature below.



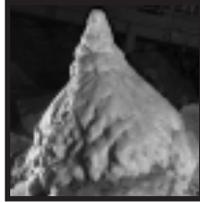
# Formation Identification



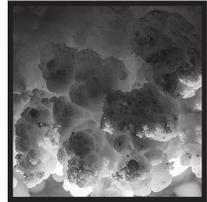
Using the word bank below, label the different types of cave formations.



\_\_\_\_\_



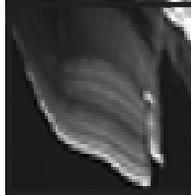
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\_\_\_\_\_



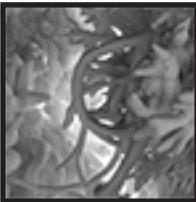
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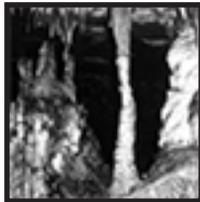
\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_

stalactite

helictite

drapery

stalagmite

column

shelfstone

soda straws

flowstone

cave popcorn

# Caving Safety



Whenever you go into a cave you need to remember to follow the "Rule of 3" to make sure you are safe and protect the cave from harm. Explain below why each rule is important to follow.

1. Carry at least 3 sources of light. \_\_\_\_\_

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2. Have at least 3 people with you at all times. \_\_\_\_\_

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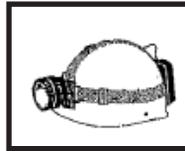
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3. Use 3 points of contact while in a cave. \_\_\_\_\_

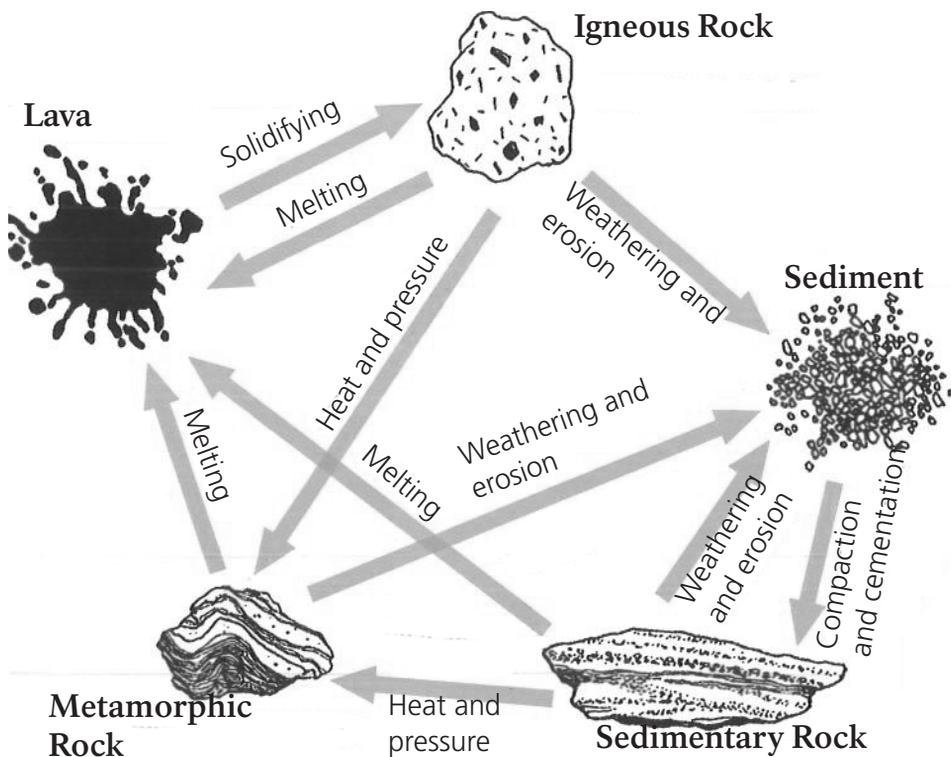
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Along with the "Rule of 3," cavers need to make sure they have the right supplies with them. Circle six items that you would bring on a wild cave adventure:



# The Rock Cycle



1. \_\_\_\_\_ rock is formed when \_\_\_\_\_  
or \_\_\_\_\_ rock is heated and under pressure.

2. Weathering and erosion create \_\_\_\_\_, which compacts  
and cements to form \_\_\_\_\_ rock.

3. When \_\_\_\_\_ or \_\_\_\_\_ or  
\_\_\_\_\_ rock melts, \_\_\_\_\_ is created.

4. When \_\_\_\_\_ solidifies, \_\_\_\_\_ rock  
is created.

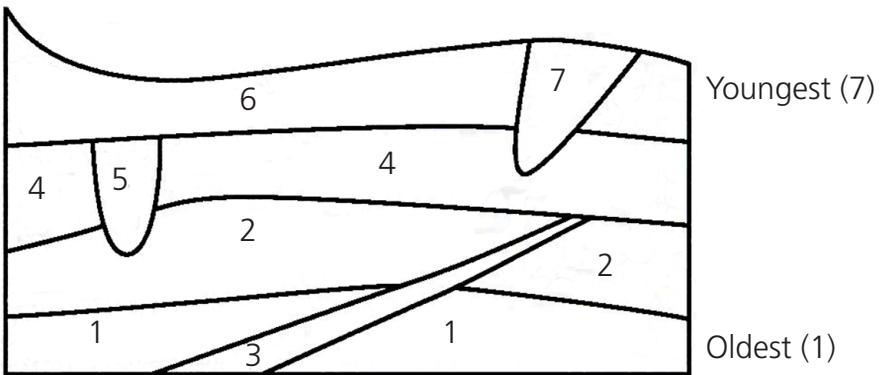
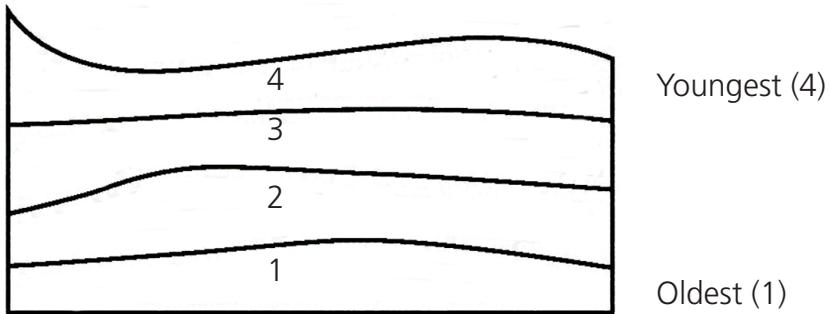
# Layer Upon Layer - Reading Geologic Time

As sediment slowly builds up, layers of rock are formed. Geologists study the layers of rock to determine how old they are.

The layers on top are typically the youngest layers and the layers found farther down are typically the oldest.

Rock layers often form in stacks but forces such as weathering, erosion, earthquakes, and other major environmental events can make them slanted, wavy, or they can be worn away to form caves and canyons.

These two diagrams show the oldest and youngest rocks in each formation.



Based on the diagrams above show what you've learned about geologic layers and order the layers in the next two diagrams from oldest to youngest.



## Junior Ranger Pledge

As a Junior Ranger, I \_\_\_\_\_,  
promise to help protect and  
preserve our National Parks and  
Monuments for everyone to enjoy  
both now and in the future. I will  
always remember to respect all  
living things.

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Signature of Junior Ranger





Timpanogos Cave National Monument  
**JUNIOR RANGER CERTIFICATE**

This is to certify that

\_\_\_\_\_

has successfully completed the requirements of the

**Junior Ranger Program**

at

TIMPANOGOS CAVE NATIONAL MONUMENT

\_\_\_\_\_

Park Ranger

