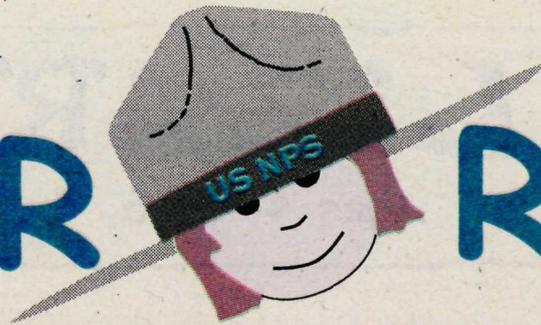


JUNIOR



RANGER

A Publication for kids produced by Joshua Tree National Park

Volume I, No.1

Six Steps to Becoming a Junior Ranger

1. Write your name here:
2. Complete the two activities on page 8.
3. Open the page for your age level and complete two activities.
 - a. Ages 4 to 7 = Lizards (page 2)
 - b. Ages 8 to 10 = Roadrunners (page 4)
 - c. Ages 11 to 14 = Coyotes (page 6)
4. Attend a ranger program or visit an exhibit in a visitor center. Get a ranger's initials here:
5. Do one of the following:
 - a. List three reasons to protect and preserve Joshua Tree National Park
 - i.
 - ii.
 - iii.
 - b. Collect a bag of litter in the park and those materials that can be recycled. Recycle bins are located throughout the park.
6. Take your completed workbook to any visitor center, entrance station, or ranger program and receive your junior ranger badge!

Special Places Need Special People!

Joshua Tree National Park is a special place that needs to be cared for by special people like you. National Parks belong to the people of the United States who have set them aside "forever" as national treasures. Each park is special and tells something unique about the United States, whether it is related to people in the past or to different natural environments in this vast country.

Joshua Tree first became protected as a national monument in 1936. In 1994, under the California Desert Protection Act, it became a national park. Joshua Tree National Park includes about 800,000 acres of unspoiled desert. In fact, two deserts, the Mojave or high desert and the Colorado or low desert meet here. Because different kinds of plants and animals live within each desert area, the park has a wide variety of both.

Have you checked out those neat rock formations? Scientists come to Joshua Tree to learn more about geology and vacationers come to climb the rocks. Human history is also an important part of the Joshua Tree story. There is evidence that humans have lived in this area for about 10,000 years, including American Indians, cattlemen, miners, and homesteaders. It's no wonder Joshua Tree National Park is a special place, worthy of protection. You can help preserve Joshua Tree and other national parks for people in the future by becoming a junior ranger.



LIZARD

Ages 4, 5, 6, & 7

Lizards are reptiles, cold-blooded animals that have to bask in the sun in order to warm their bodies. That is why you will often see them sitting on a rock, allowing the sun to heat them from above, and the rock to warm them from below. We have the world's smallest reptile here at Joshua Tree National Park, the yucca night lizard.

During winter, most lizards hibernate, saving their energy for spring when it warms up again. Then they can spend their days hunting for insects, or nibbling wildflowers. Watch for lizards on top of boulders and along the side of the road.

Hunting for Habitat

The place where animals live is called a habitat. A good habitat will provide an animal with food, water, shelter, and space. While you are in the park, look for good habitat for desert animals.

In the squares to the right, draw pictures of three kinds of food for desert animals, three places where an animal has made a home, and three different animals you have seen. Good luck!

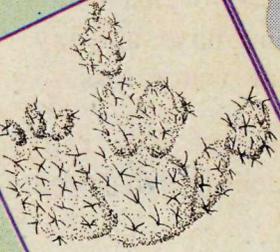
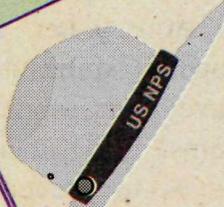
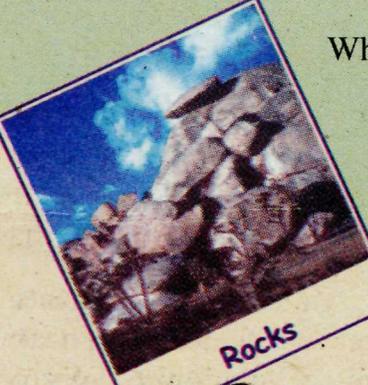
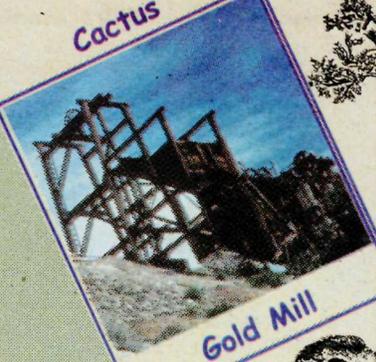
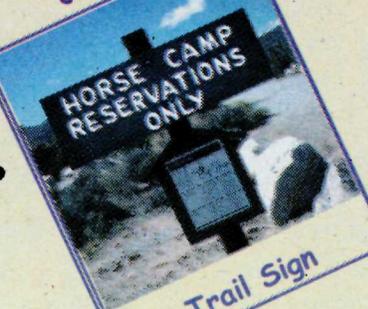
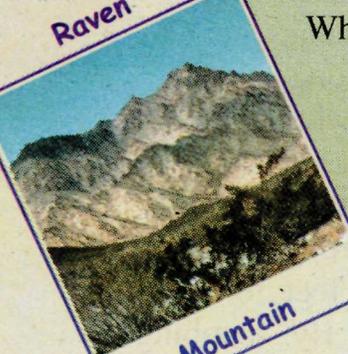
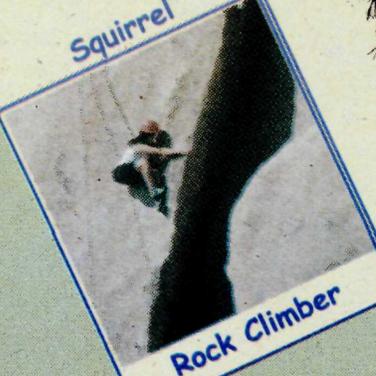
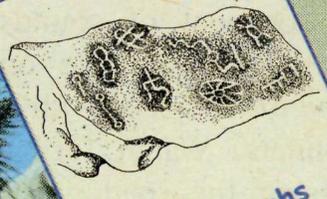
food

shelter

animals

Scavenger Hunt Bingo

Go on a scavenger hunt in the park. Look for, but don't collect, the items in the boxes below. Remember to leave the plants and rocks where you find them. Place an "X" on the items that you find. Find four in a row down, across or diagonally in order to complete this activity. Can you find them all?

 Cactus	 Ranger Hat	 Lizard	 Rocks
 Gold Mill	 Juniper	 Burrow	 Raven
 Squirrel	 Trail Sign	 Track	 Mountain
 Rock Climber	 Fan Palm	 Joshua Tree	 Pictographs

Lazy Lizard Eye

Have you ever seen a lizard sitting on a rock, soaking up the sun? Sit quietly, and pretend that you are a lizard!

What do you see around you?

How many sounds do you hear and what might they be?

What do you feel?



ROADRUNNER

Ages 8, 9, & 10

Plant Sketch

Desert plants have many different adaptations to survive the summer heat. Some plants can store water. Some use little white hairs on their leaves or white spines to reflect back the sun's rays. Other plants have hairs, spines, or leaves that provide shade for their stems. Still others have a waxy coating on their stems and leaves to prevent water loss.

Draw plants that you find with these adaptations. You can use a plant guide or ask a ranger to help identify what you drew so you can label your sketches.

Remember not to pick any plants inside the park!

Roadrunners are well-known for their long beaks, the ability to run fast, the odd clacking noises they make, and their strange diet. They can use their long, sharp beak like a spear, allowing them to catch lizards and snakes. Although they are able to fly, they prefer to stay close to the ground, using their huge, X-shaped feet to run across the desert floor. By snapping their jaws open and shut, they produce an odd assortment of sounds, allowing them to communicate on a wide variety of subjects with other roadrunners. Watch for them crossing the road, and whizzing across open spaces.

This plant stores water

This plant has a waxy coating

This plant reflects sunlight

This plant provides its own shade

Tracks and more Tracks!

Many different animals call Joshua Tree National Park home. See if you can match each set of animal tracks below with the correct animal name.

Coyote



Mountain lion



Bighorn sheep



Roadrunner



Kangaroo rat



Lizard



Desert tortoise



Rattlesnake



Gambel's quail



Jackrabbit



Desert Shopping

Walk through a natural area that has native desert plants. Imagine that you are an American Indian child living in this desert area and your parents are teaching you to be a skilled hunter and gatherer. They gave you the list below of things that your family needs. Look closely at the things around you. Draw pictures in the boxes of what you would bring back.

something to grind seeds with

plant with fibers for basket making

a sharp point for a sewing needle

straight sticks for arrow making

dinner (desert tool!)

something for a child to play with



COYOTE

Ages 11, 12, 13, & 14

Maybe you've seen them skulking around the Hidden Valley picnic area or alongside the road. Coyotes are the largest wild dog we have at Joshua Tree National Park, and they may also be the smartest. They have learned that humans will sometimes throw them tidbits of food, although that is against park rules. Coyotes are omnivores by nature: they eat both plants and animals. A proper diet in the wild consists of rabbits, other small game, berries, grass, and seeds. Being dependent on human food is likely to make them ill, and they should never be fed. Coyotes are nocturnal animals, and they are often heard yipping and calling to one another in the early evening. Watch for them in the rocks and trotting through our desert washes.

Amazing Animals

Lots of animals live in Joshua Tree National Park, although visitors don't always see them. If you look closely, you will find clues about what animals have been doing in the areas that you visit in the park. What animal signs do you see? Maybe you see a footprint or track, scat or animal droppings, nibblings on a plant, a feather on the ground, or possibly the animal itself. In the space below, list five signs that you observe. Be sure to include what animal you think it belongs to and what you think the animal was doing. Look closely! You might be surprised at what you observe! If you want to, sketch what you see.

1. _____
2. _____
3. _____
4. _____
5. _____

Who Am I

The government said the land was free so I loaded the wagon, hitched the team, and headed west.

I am the _____

Dammed the water so the doggies could drink. The grass grew waist high then. Plenty of food for my cattle.

I am the _____

Where there's quartz there's gold, they say. So I came with my pick ax to make my fortune. It was hard work breaking that rock!

I am the _____

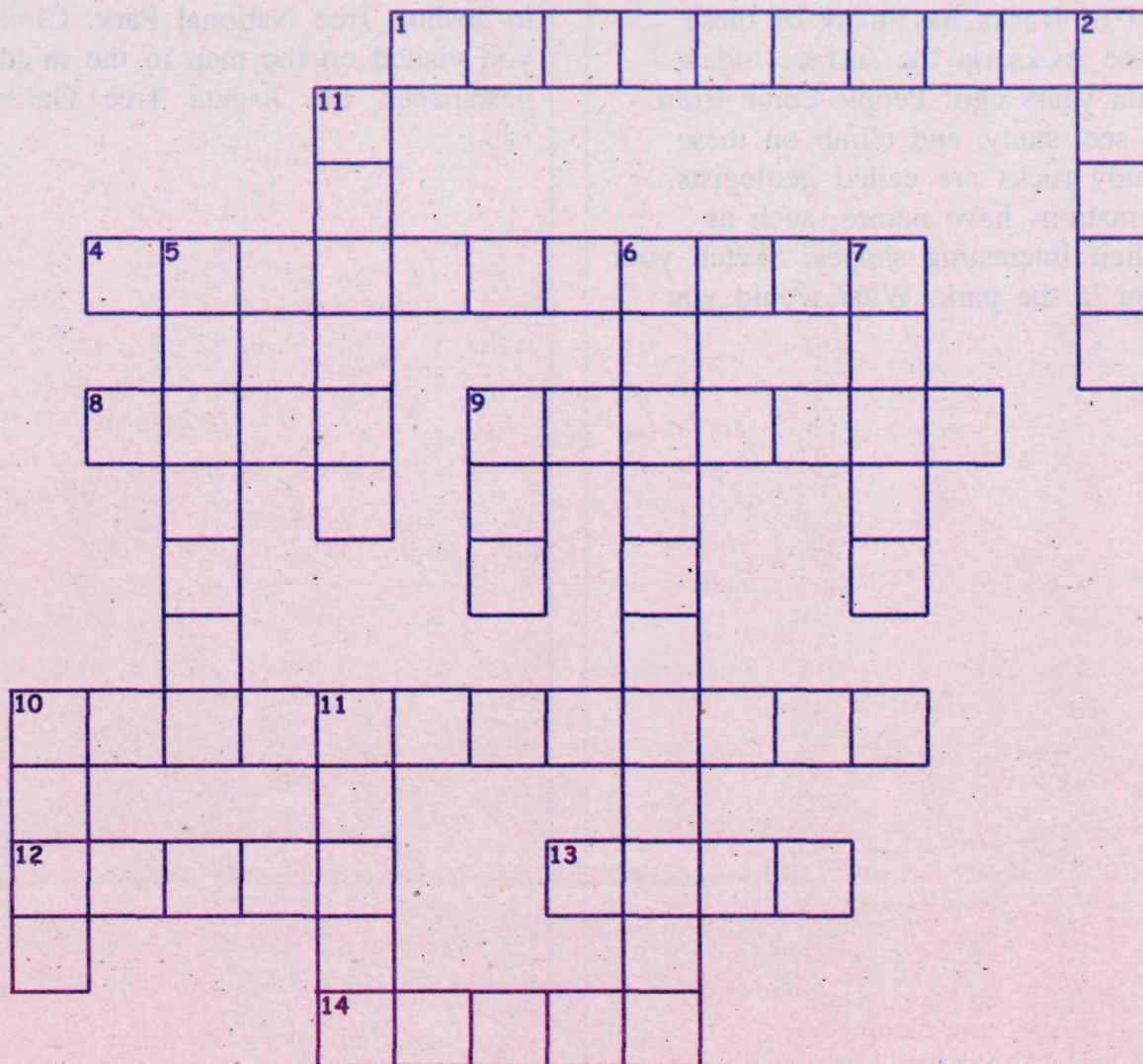
Long ago I hunted for my food and made my clothes from plants and animal hides. I left pictures on the rocks for you to enjoy.

I am the _____

I work to protect the park's resources and the visitors who come to enjoy them.

I am the _____

Geology Crossword Puzzle



Across

- 1** the process by which rock breaks down as a result of exposure to wind, water, and ice
- 4** of the three main types of rock, the type that changes existing rock through pressure and heat. Sometimes called "squished rock" by geologists
- 8** a piece of equipment used by rock climbers to secure ropes along a climbing route
- 9** the most common of the three types of rock, this one is formed when molten material (magma) rises toward the surface, either extrudes or is stopped by an overlying layer, and cools
- 10** the kind of igneous rock of which the lighter-colored boulders of Joshua Tree National Park are composed
- 12** what mountaineers from all over the world come to Joshua Tree National Park to do
- 13** an agent of erosion, this force may whip up sand and gravel and blast the surrounding rocks

- 14** a slope formed by an accumulation of rock debris

Down

- 2** the transparent material that is formed from sand
- 3** the main mineral in granite, usually a whitish color
- 5** the process by which rocks are broken down and moved by wind, water, or ice
- 6** the type of metamorphic rock that overlies the monzogranite in Joshua Tree NP
- 7** the top layer of planet Earth
- 9** water at 32°F or 0°C; where is ice
- 10** a mineral that is transparent or colored, and readily separates into very thin leaves
- 11** the path of a planet around a star, or of a satellite around a planet; a circular path

quartz, talus, weathering, wind
 monzogranite, orbit, pinto gneiss,
 igneous, metamorphic, mica,
 bolt, climb, crust, erosion, glass, ice,

Activity 1

Joshua Tree National park is famous for its rock formations. The Wonderland of Rocks has many of these large boulder piles. The rocks on the surface today were molten 83 million years ago! People come from all over the world to see, study, and climb on these rocks. People who study rocks are called geologists. Some of the rock formations have names, such as Skull Rock, due to their interesting shapes. Sketch your favorite rock formation in the park. What would you call it?

Name of rock formation:

Activity 2

Draw or write what you liked best about your visit to Joshua Tree National Park. Circle the places that you visited on the map in the middle of the park newspaper, the Joshua Tree Guide.

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Taking the Junior Ranger Pledge

"I _____ (name), promise to do my best to be a friend to nature and to the legacy of the past. I promise that I will not intentionally pollute, destroy, frighten, or harm plants or animals, however big or small. I promise to respect areas left by people long ago and not to destroy them. I realize my actions will be an example to other people older and younger. I promise not to destroy nature while I enjoy nature."