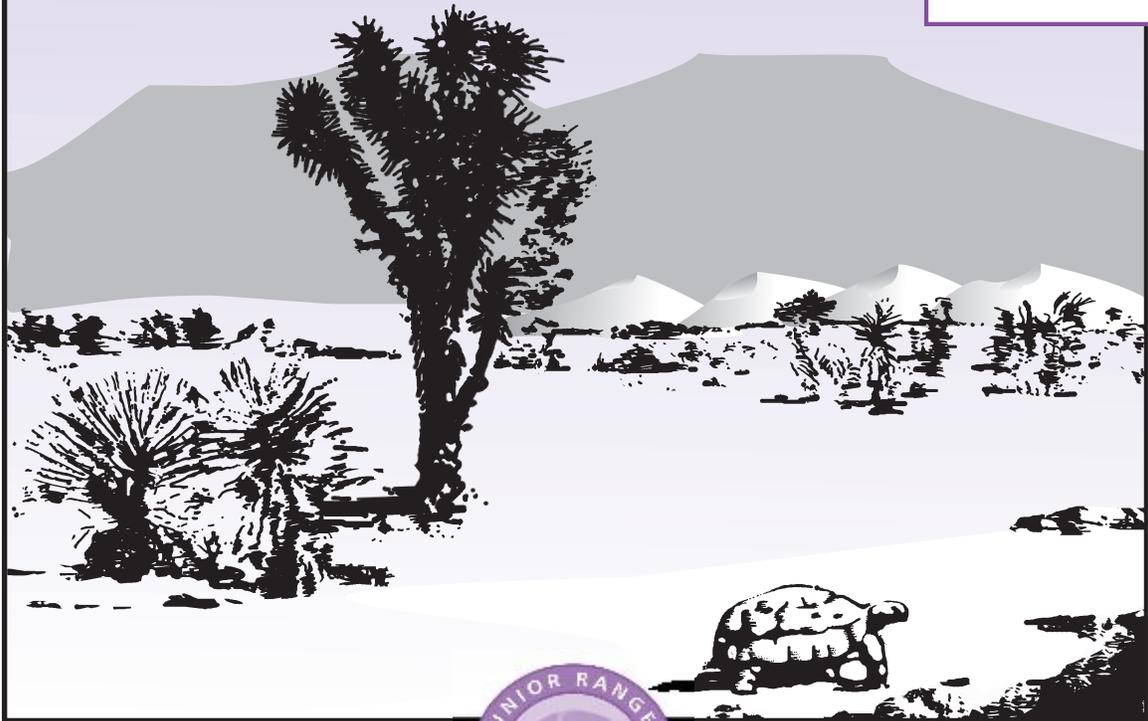
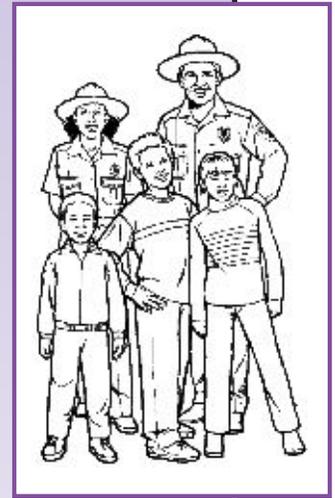


Mojave

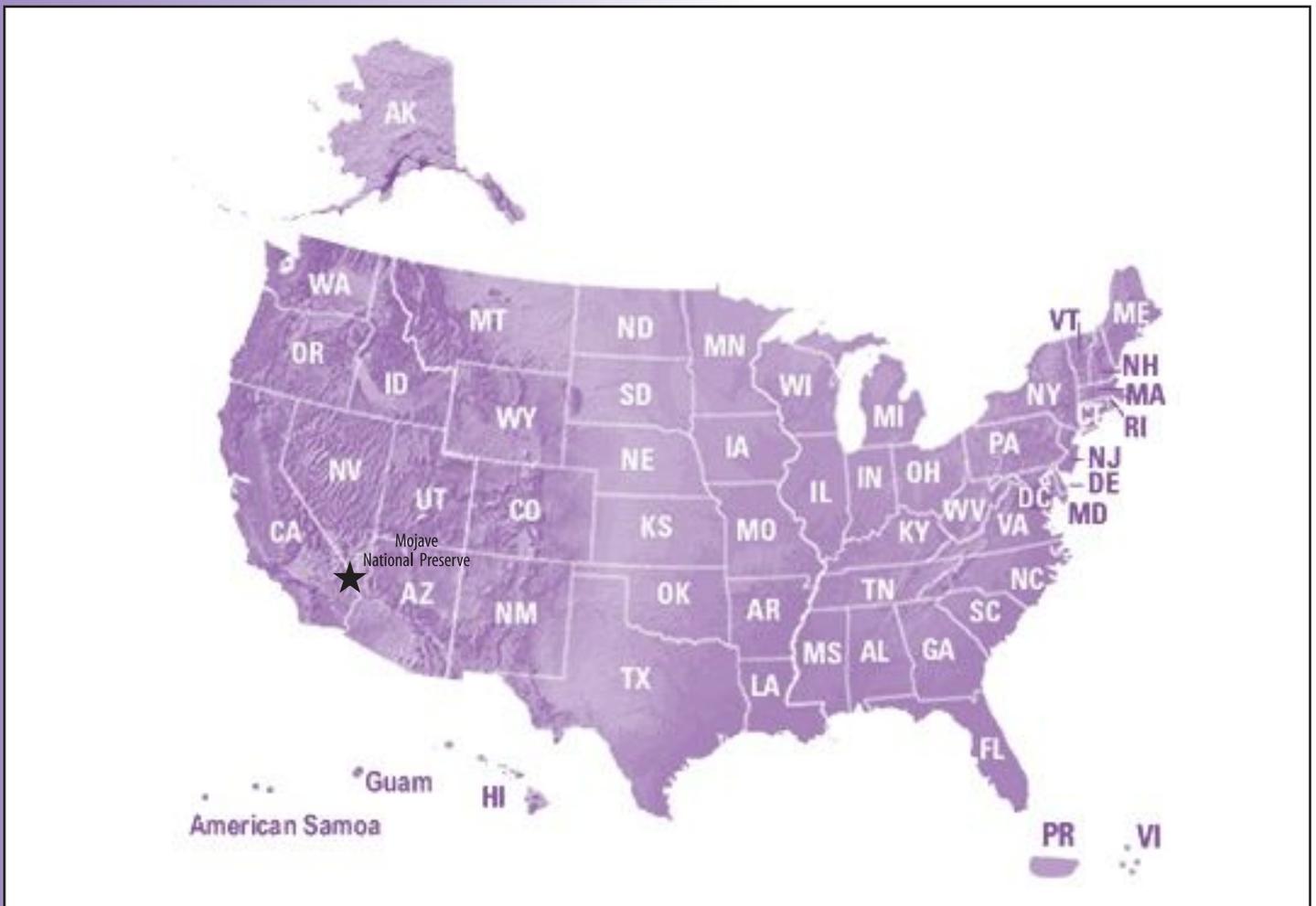
National Preserve





You'll find our national parks all across the United States, from the cold coast of Alaska to the swampy tip of Florida. Many parks offer visitors the chance to become a Junior Ranger. With the program, you'll discover each park's wild beauty and colorful human history. You'll even receive a special badge or pin. The more parks you visit, the more Junior Ranger badges and pins you can collect.

So get out your walking shoes, your water bottle, and your sun hat... it's time to go exploring!



Safety First!

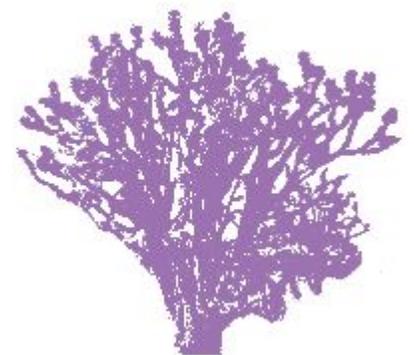
Be sure to carry water with you at all times—even as you drive.

Be careful where you put your hands and feet: snakes may be resting under rocks and in holes.

Wear a hat and sunscreen.

Hike with other people. If you get lost, stay in one place.

Avoid touching or brushing against cactus spines.



Mojave National Preserve JUNIOR RANGER GUIDE

Discovering Mojave National Preserve



If you had been a traveler through the Mojave Desert 150 years ago, you might have been in a hurry to get out. High temperatures, steep mountains, and lack of water made early journeys here perilous.

But for those who linger, Mojave has always revealed many wonders: the slow amble of desert tortoises, the crazy poses of Joshua trees, sweeping dunes and colorful cacti.

We encourage you to explore as much of Mojave National Preserve as you can—by car and especially on foot.

You can learn more about this national park by completing the activities in this book. In the process, you'll also qualify to become a Junior Ranger. You can work alone, with a parent, or even with a team of friends. Just bring your completed guide to a Park Ranger to claim your Mojave National Preserve junior ranger badge. You can also mail in your completed booklet. A ranger will review it and return it along with your badge. Mail to: Park Ranger, Mojave National Preserve, 2701 Barstow Road, Barstow, CA 92307.

Did You Know?

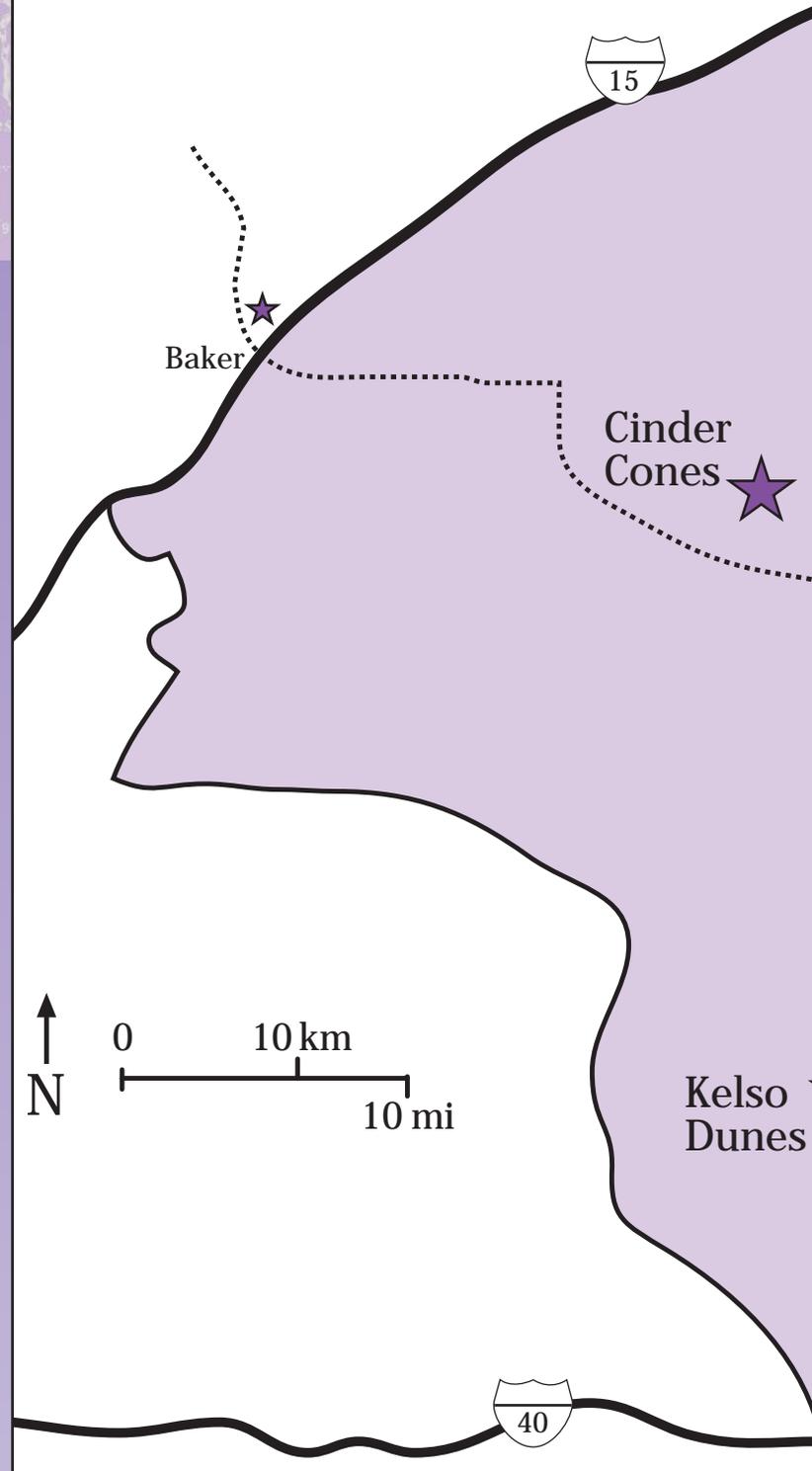
Mojave National Preserve is 1.6 million acres. It's the third largest national park outside Alaska.

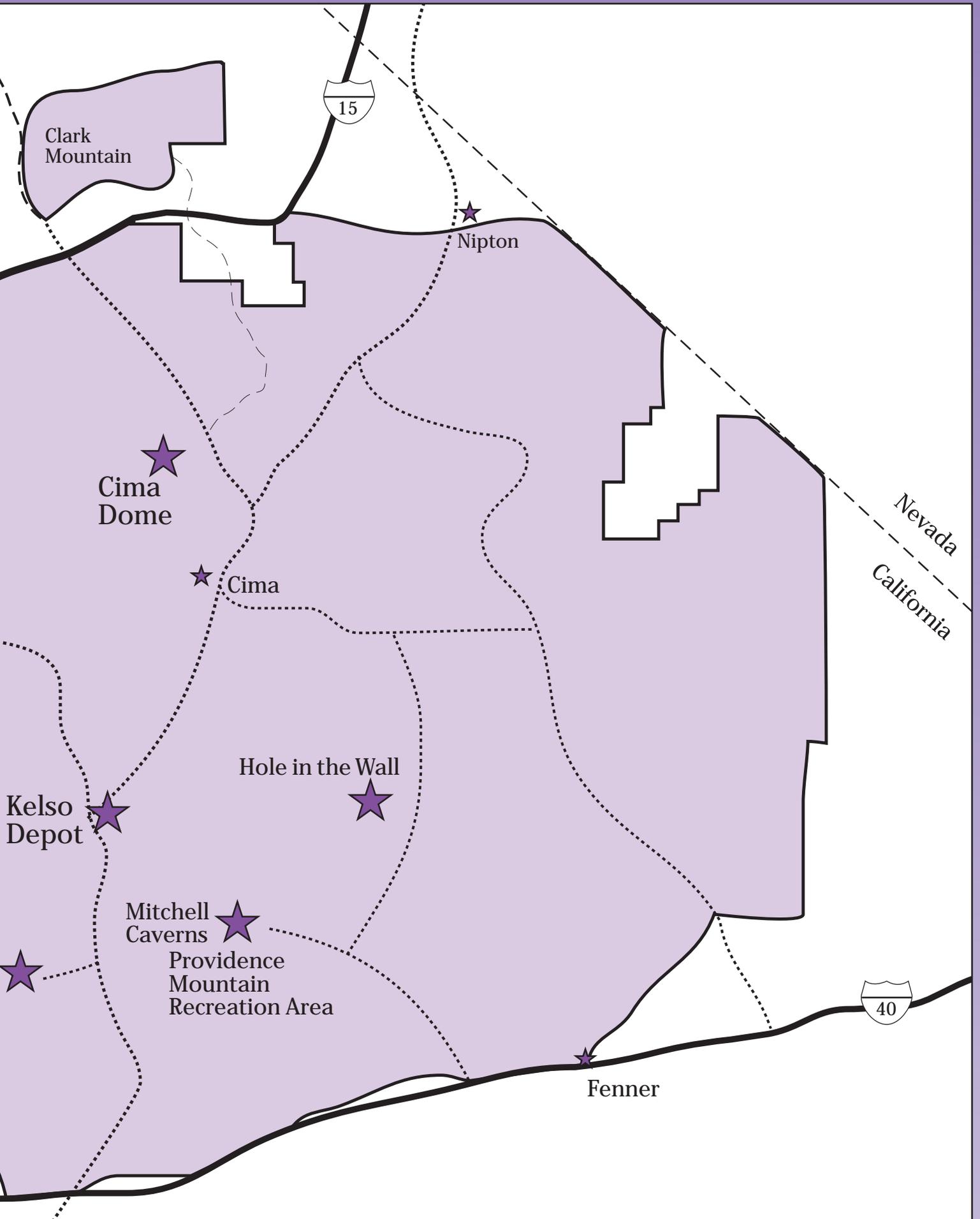
Mapping Your Visit

Use pens or pencils to trace your route through Mojave National Preserve on the map to the right. Use different symbols to show where you drove and where you hiked. If you want, make up your own symbols for things such as picnics, wildlife, or ruins. Add pictures and words in the space below to record your thoughts, feelings, and favorite sights and sounds along the way.



Mojave National Preserve





Clark
Mountain

15

Nipton

Cima
Dome

Cima

Nevada
California

Hole in the Wall

Kelso
Depot

Mitchell
Caverns

Providence
Mountain
Recreation Area

40

Fenner

Weather Watchers



When we say a desert is hot and dry, we're referring to its climate—the average conditions over big spans of time. But day-to-day conditions are known as weather. And desert weather can vary a lot!

Pick a good spot to sit down and record today's local weather in the chart below.

[Note: There's a thermometer at the Hole-in-the-Wall Information Center and at Kelso Depot. If you don't have a thermometer, describe the temperature.]

Today's date:

Location:

Precipitation (rain, snow, other):

Wind (still, breezy, windy, and so on):

Have you noticed how any animals are responding to the weather? Describe.

If possible, try this activity again at night. How do the conditions compare?

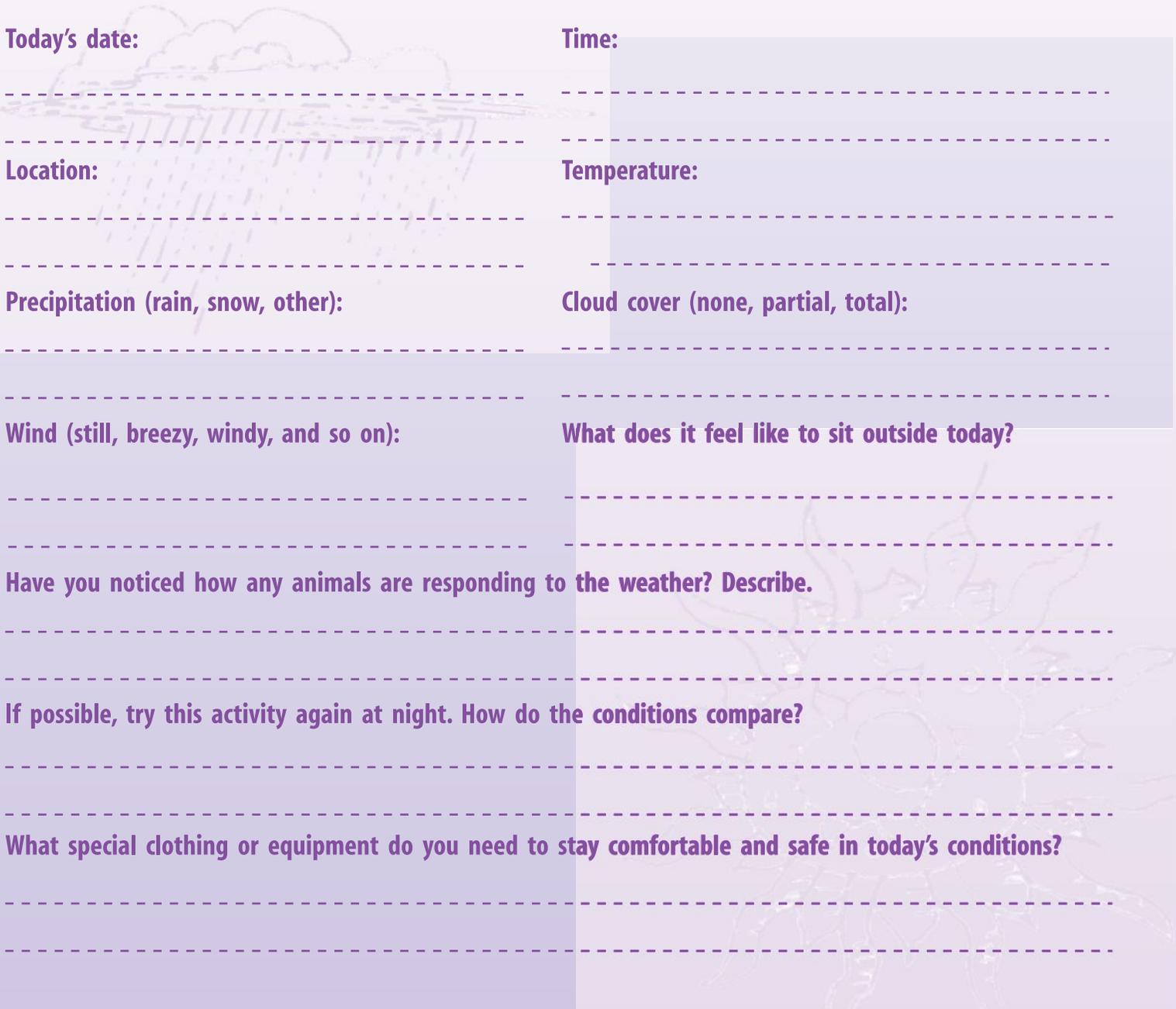
What special clothing or equipment do you need to stay comfortable and safe in today's conditions?

Time:

Temperature:

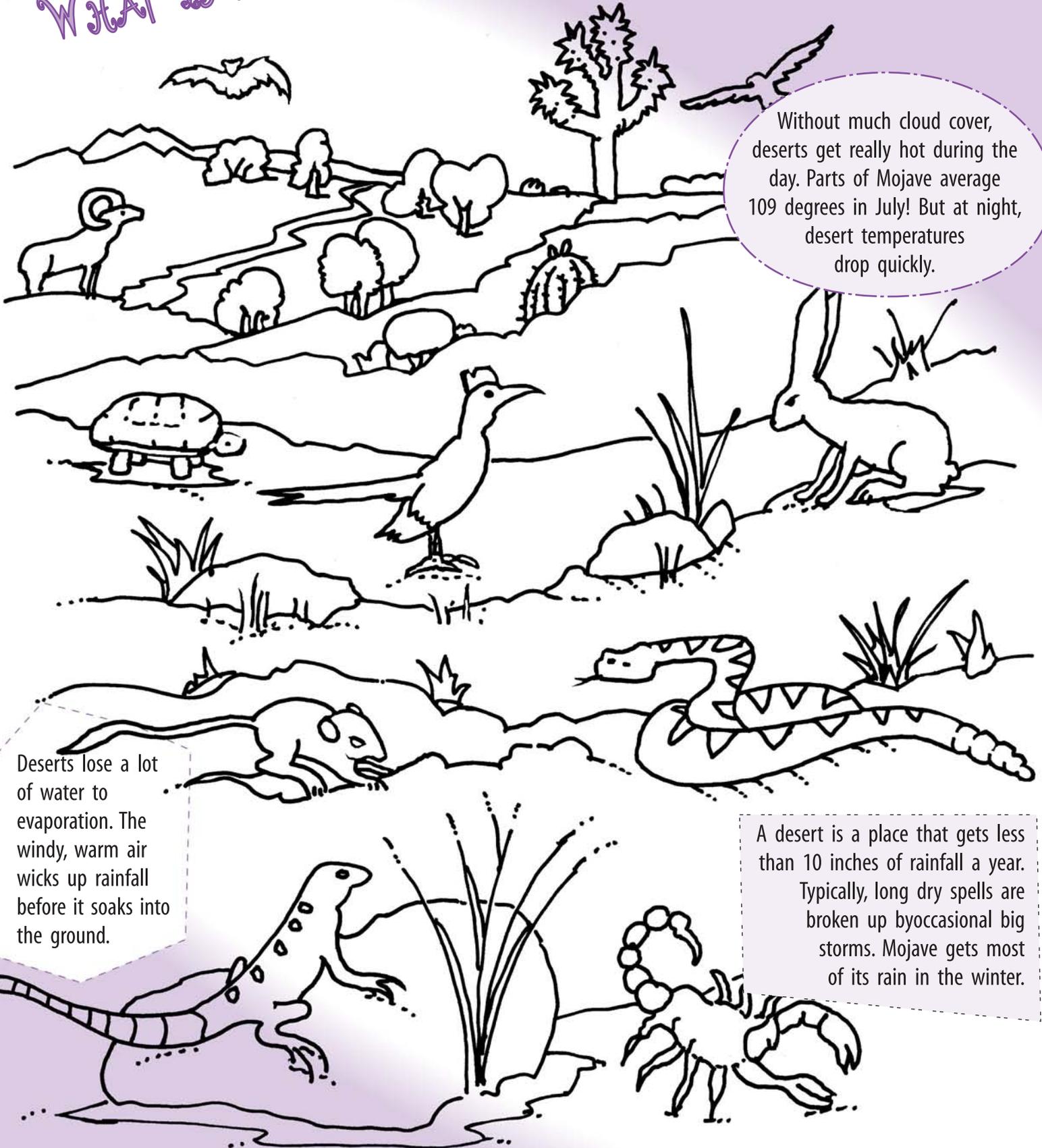
Cloud cover (none, partial, total):

What does it feel like to sit outside today?



WHAT IS A DESERT?

Color in the picture to discover some of the wonders of the Mojave Desert.



Without much cloud cover, deserts get really hot during the day. Parts of Mojave average 109 degrees in July! But at night, desert temperatures drop quickly.

Deserts lose a lot of water to evaporation. The windy, warm air wicks up rainfall before it soaks into the ground.

A desert is a place that gets less than 10 inches of rainfall a year. Typically, long dry spells are broken up by occasional big storms. Mojave gets most of its rain in the winter.

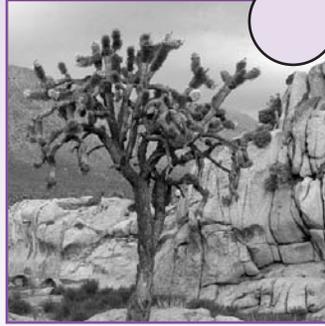
MOJAVE SCAVENGER HUNT

As you drive through Mojave National Preserve, watch for the following items and check them off when you see them. Try to check off at least eight of the objects.

Lava Rock



Joshua tree



Ground squirrel



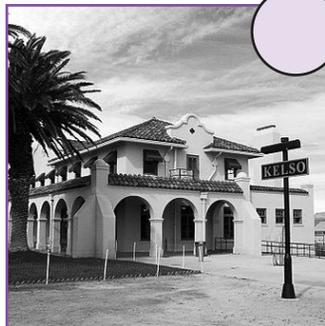
Feather



Insect



Kelso Depot



Cinder cone



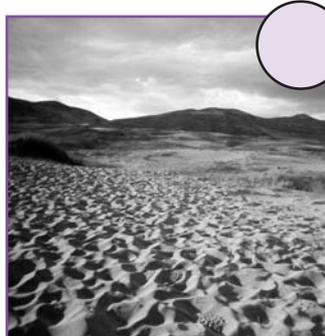
Cactus



Blacktailed Jackrabbit



Sand dunes



Animal track



Yucca



Hole in the Wall



Raven



Animal burrow



Lizard





DESERT SURVIVORS



The plants and animals of Mojave have special ways of coping with the hot, dry desert conditions. These are called adaptations. For example, cacti and desert tortoises are capable of storing water for long periods of time.

Some animals are pale in color. That helps their skin reflect away some of the sun's heat. Draw a picture of a light-colored animal.

Some plants and animals live near springs. A spring is a place where underground water sources flow out of the ground. Draw a picture of a plant or animal you think would live in or beside a spring.

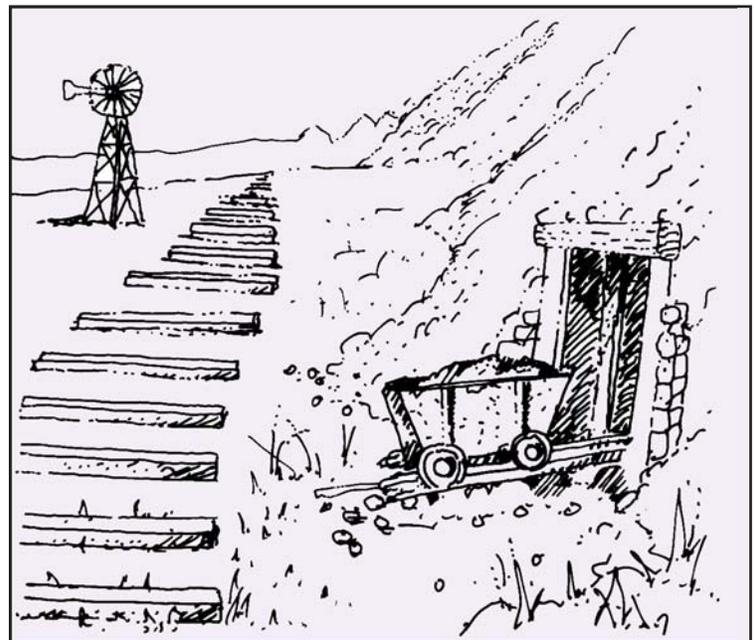
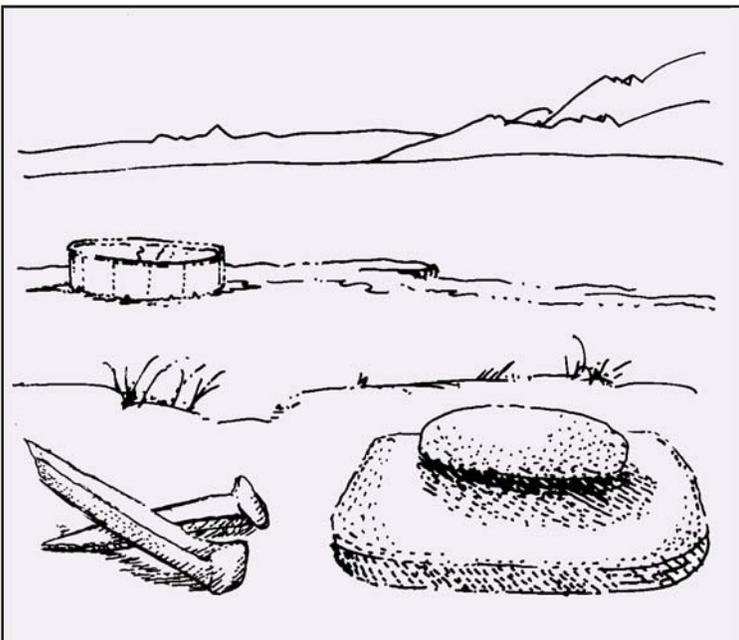
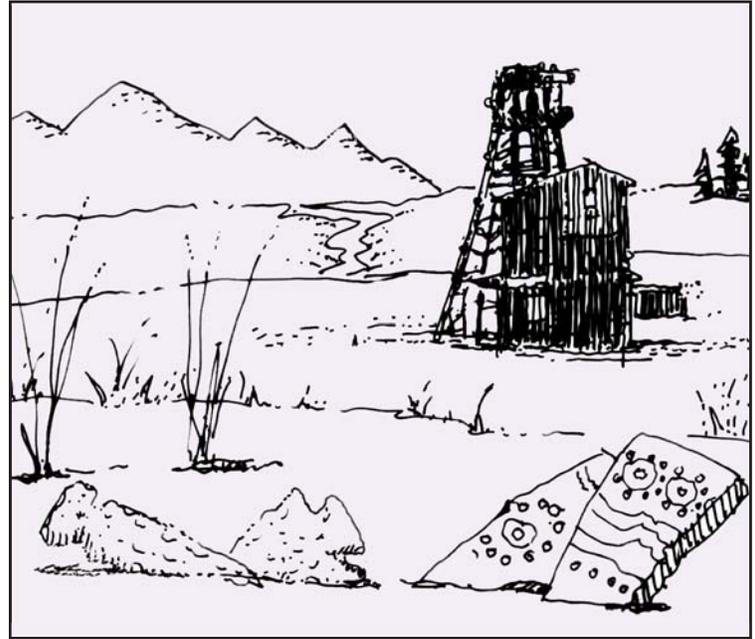
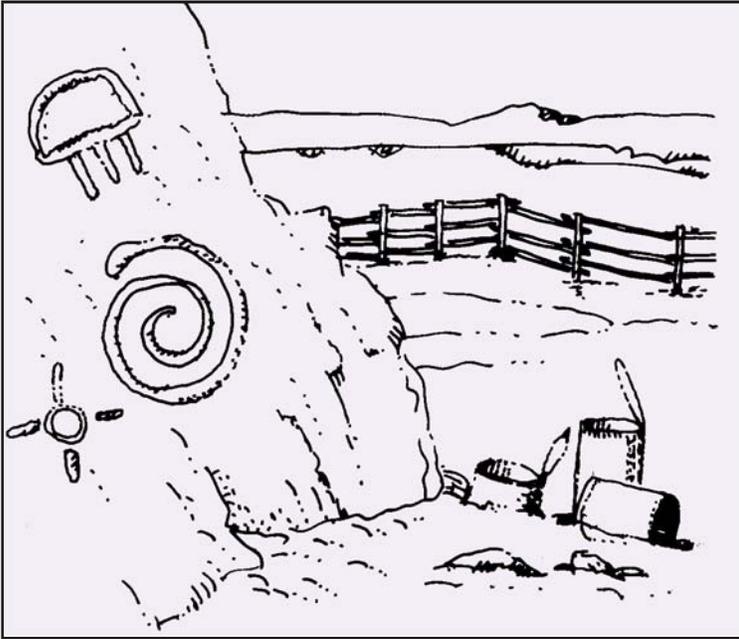
Some animals burrow underground to stay cool during the day and warm at night. Draw a picture of a desert burrower.

Some animals avoid coming out in the hot daylight hours. Draw a picture of an animal that is nocturnal, or active at night.

Traces of the Past

The earliest visitors to this region were Indians. Mojave Indians traveled across the desert to trade with coastal Indians. Chemehuevi Indians traveled around the desert—hunting, trapping, and collecting pine nuts, chia seeds, and other plants. Both tribes still live along the Colorado River. Miners arrived in the mid-1800s, searching for gold and silver. Miners did not have time to raise food or hunt. They typically ate food from tin cans. Ranchers came to the area in the 1880s. They raised cattle and sold the beef to the miners. Railroaders completed the first railroad line across the Mojave Desert in 1883.

Today, it's possible to find traces of all these groups. See if you can find three remains in each of the following pictures.



Find the following artifacts left by these Mojave visitors over time: Chemehuevi and Mojave Indians—Pictographs, Mano and metate (tools for grinding seeds), Arrowheads. Ranchers—corrals, water tanks, windmill. Miners—old tin cans, mine headframes, mine shaft. Railroaders—spikes, china shards, ties left in place with track removed

In the early 1900s, Kelso became an important rail town. That's because passing trains had to stop in Kelso for extra locomotives to get them up the steep hill of Cima grade. At its peak, the town of Kelso was home to about 2,000 railroaders, miners, ranchers, and their families.

What would it have been like to be a kid growing up in Kelso?

NEIGHBORHOOD

In Kelso, almost all the houses were exactly the same, and nearly every kid's father worked for the railroad. How does this compare to your neighborhood?



SCHOOL

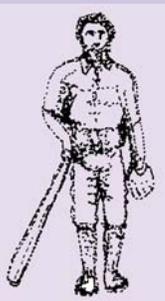
Kids in Kelso attended school in a one-room schoolhouse until they went to high school in other cities.

What kind of school do you go to?



RECREATION

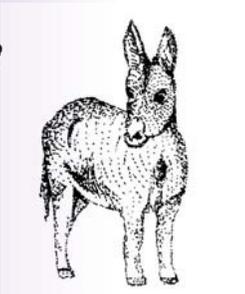
In their free time, kids in Kelso did chores, played baseball, swam in the water tanks, and rode the trains to the top of Cima Dome. What do you do in your free time?



PETS

Many kids in Kelso had burros, or donkeys, for pets. Some raised desert tortoises. Do you have a pet?

What kind?



Note: You can see and hear more about life in Kelso by looking at the photo and video exhibits at the Kelso Depot Information Center.

LOOK AROUND

Kelso Depot isn't the only fun place to stop at Mojave National Preserve. Make a visit to at least one of the following three special sites and try the corresponding activity.



Hole-in-the-Wall

If you haven't figured it out already, Hole-in-the-Wall is named for the holes in the rocks. This kind of rock, called rhyolite, formed millions of years ago when eruptions of ground-hugging volcanic ash and gases rolled across the land, picking up pebbles and twigs along the way. Wind and rain enlarged the gases trapped in the cooling rock, creating holes.

See how long it takes you to find three twigs and three pebbles embedded in the rocks. Then draw a picture to show what these rocks look like.

With your parents, hike the Rings Trail to the bottom of Banshee Canyon. At the bottom, look for Mojave yucca and barrel cactus. Describe the walls of Banshee Canyon. How do you think it formed?

Teutonia Peak

Take a closer look at the Joshua trees that grow here. Do you know that some can live to be 200 years or more? Joshua trees benefit many other living things. Yucca moths lay their eggs on them, and their young live inside the trees' fruits. Night lizards hide out in them, feasting on crickets, termites, and other insects. Twenty-five bird species nest in the trees.

Spend a few minutes observing a Joshua tree. Do you see any animals in and around it? Draw a picture of your Joshua tree here.



Kelso Dunes

The sandy surface around Kelso Dunes can reveal which animals have recently passed through. Look around and if you can find examples of these five animal tracks:

lizard (a)

darkling beetle (b)

kangaroo rat (c)

sidewinder (d)

coyote (e)

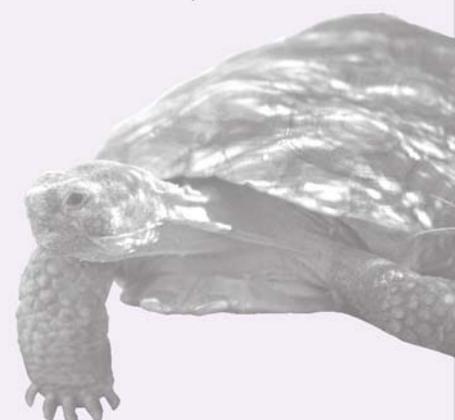


Do you see any other interesting tracks? Draw them here.



Tortoise HELPERS

Desert tortoises are well adapted to desert conditions. They can survive for more than a year without access to water. They also dig burrows with their sharp claws to escape the heat. Desert tortoises can live to be 60-80 years old. But many die earlier, mostly due to human effects. Imagine that you're Dr. T, who's been called in to help respond to tortoise emergencies. How would you solve the following problems?



Dear Dr. T: People keep picking up tortoises they see along the road. This scares the turtles so much they empty their bladder, losing all their saved water. What should we do

Signed

Miss P. Knott

Dear Dr. T: We've got a huge population of ravens around here. We think they're attracted to all the food and trash left by humans. Problem is, they also eat baby tortoises. What should we do?

Signed,

RavenMad

Dear Dr. T: A family just returned their pet tortoise to the wild. Problem was, it had picked up a virus from the family or their pets. Now it's making all the other tortoises sick. What should we do? Sincerely,

*Nyah Cary
Germs*

Dear Dr. T: Help! We've been noticing that desert tortoises crawl under parked cars for shade.

When the cars pull away, they run over the tortoises. What can we do?

Sincerely,

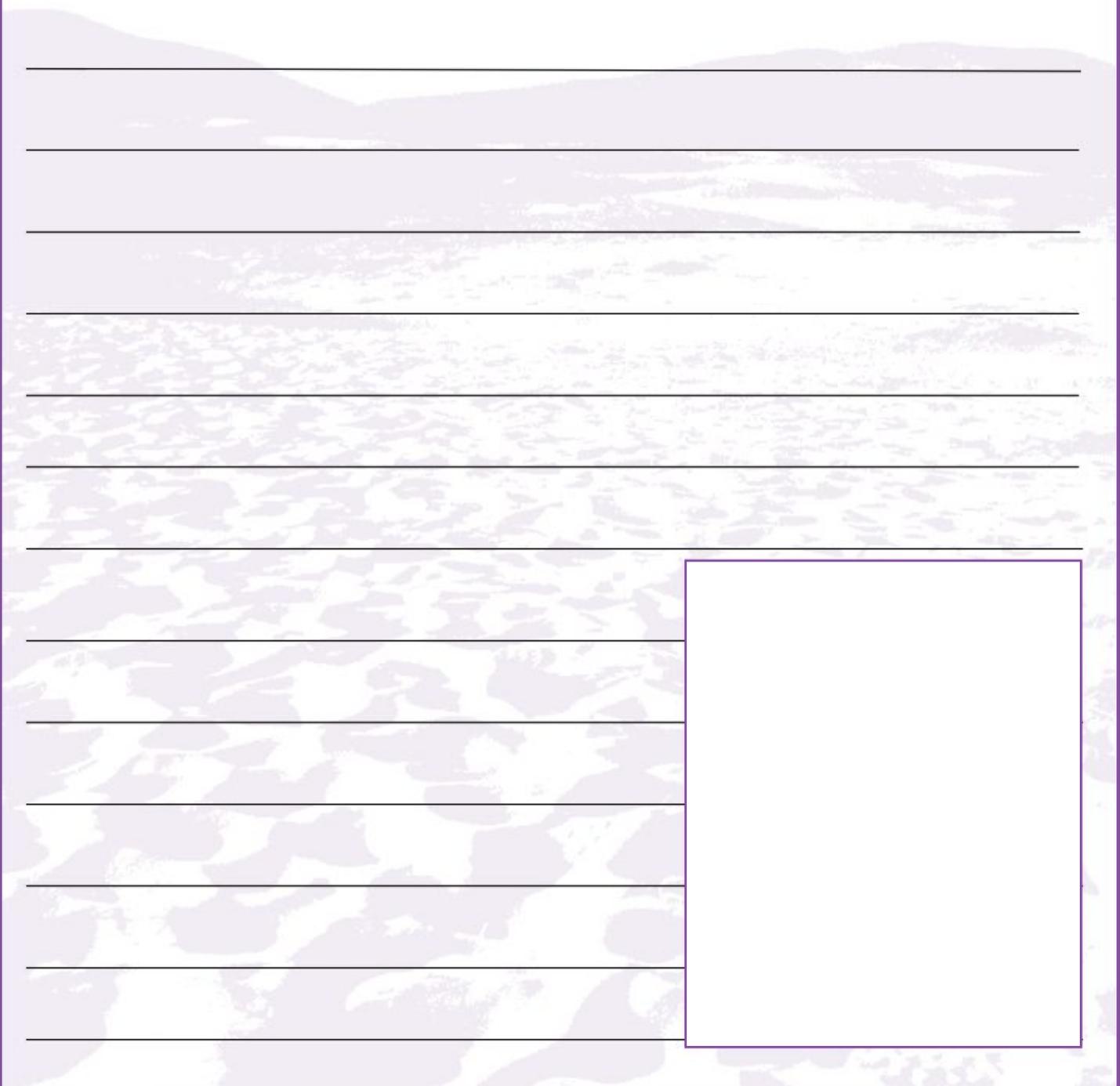
Norm Parker

Dear Dr. T: Got any ideas for how to keep these dirt bikes and quads away from tortoise habitat? They crush tortoises and their underground homes. Signed,

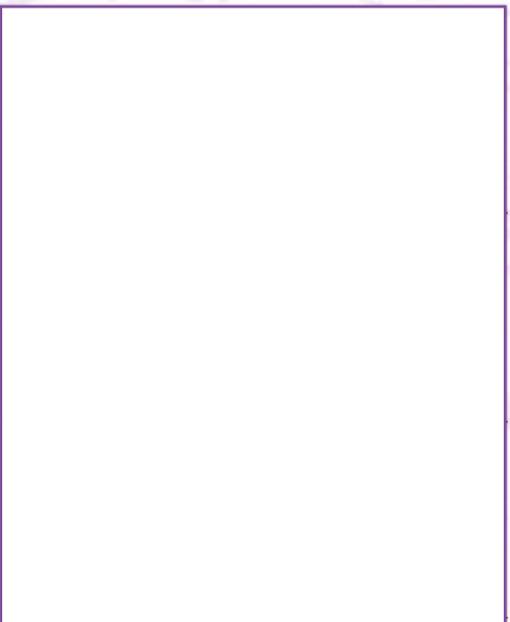
Otto Stop

In Your Own Words

What was your favorite part of your visit to Mojave National Preserve? Write about it—
or draw a picture—in the space below.



A series of horizontal lines for writing, overlaid on a background image of a desert landscape with mountains and a dry lake bed. The lines are spaced evenly down the page, providing a guide for writing or drawing.



Mojave National Preserve

Junior Ranger Pledge

I promise to have fun in the desert,
to continue to learn about, respect,
and preserve the plants, animals,
and historic sites of
Mojave National Preserve
or any other wild area
for today and always.

Written by Sara St. Antoine
Designed by Boelts/Stratford Associates
Edited by Abby Mogollón
Special thanks to the staff at
Mojave National Preserve
for their care and direction with this project.

Published by Western National Parks Association
Copyright ©2006 Western National Parks Association
This publication was produced with funds
donated by Western National Parks Association
and is intended for educational purposes only.
To learn more about WNPA
please visit our website at www.wnpa.org

Become a WebRanger

As a WebRanger, you'll learn what Park Rangers do
to help protect our natural resources and our cultural
heritage. You'll also learn how Park Rangers observe
and discover new things about our national parks—
things to share with visitors like you.

<http://www.nps.gov/webrangers/>

