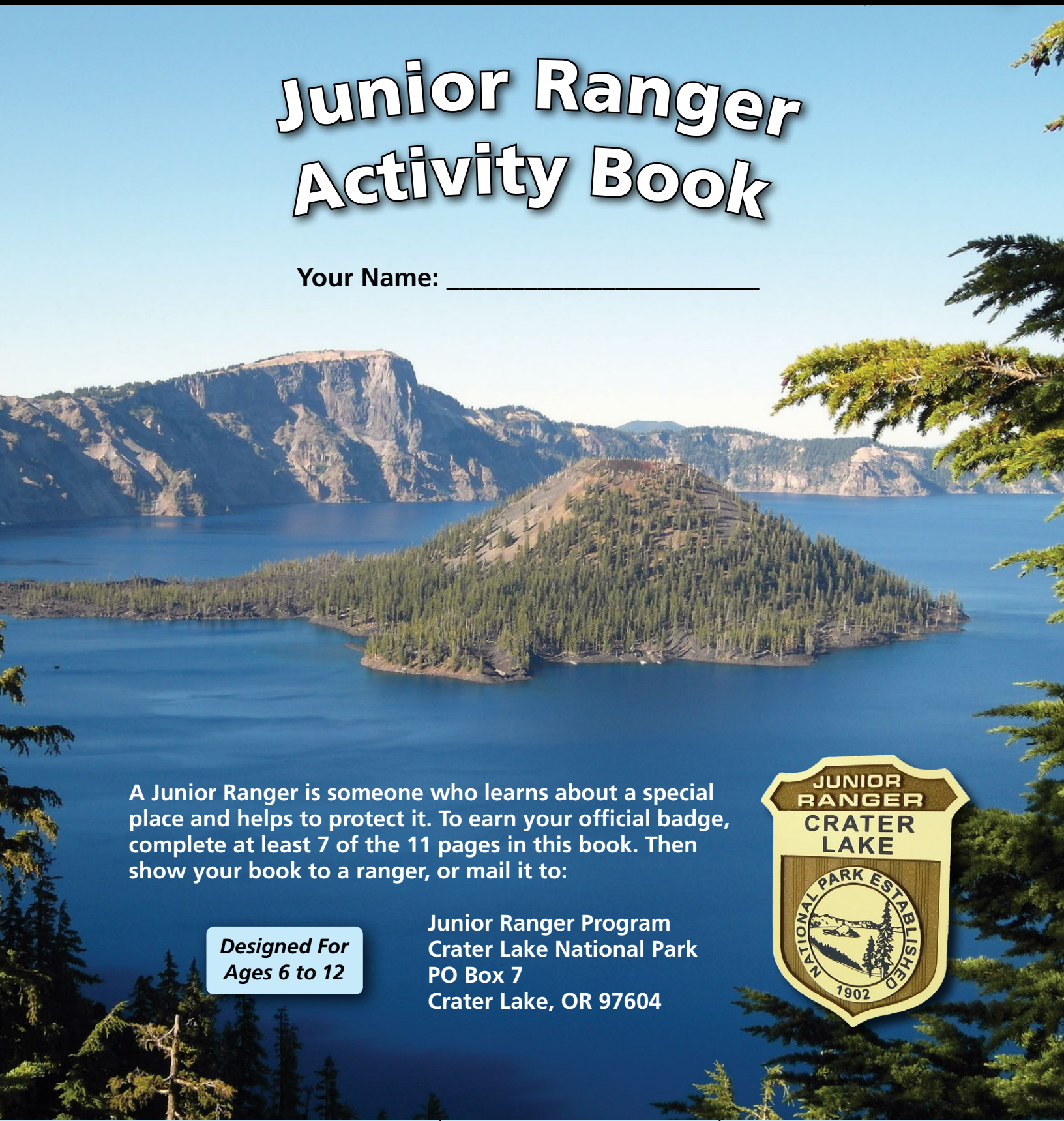
Crater Lake

National Park Service
U.S. Department of the Interior

Junior Ranger Activity Book

Your Name: _____



A Junior Ranger is someone who learns about a special place and helps to protect it. To earn your official badge, complete at least 7 of the 11 pages in this book. Then show your book to a ranger, or mail it to:

Designed For Ages 6 to 12

Junior Ranger Program
Crater Lake National Park
PO Box 7
Crater Lake, OR 97604

The Crater Lake Natural History Association paid for the printing of this book and for your Junior Ranger badge. Hooray!

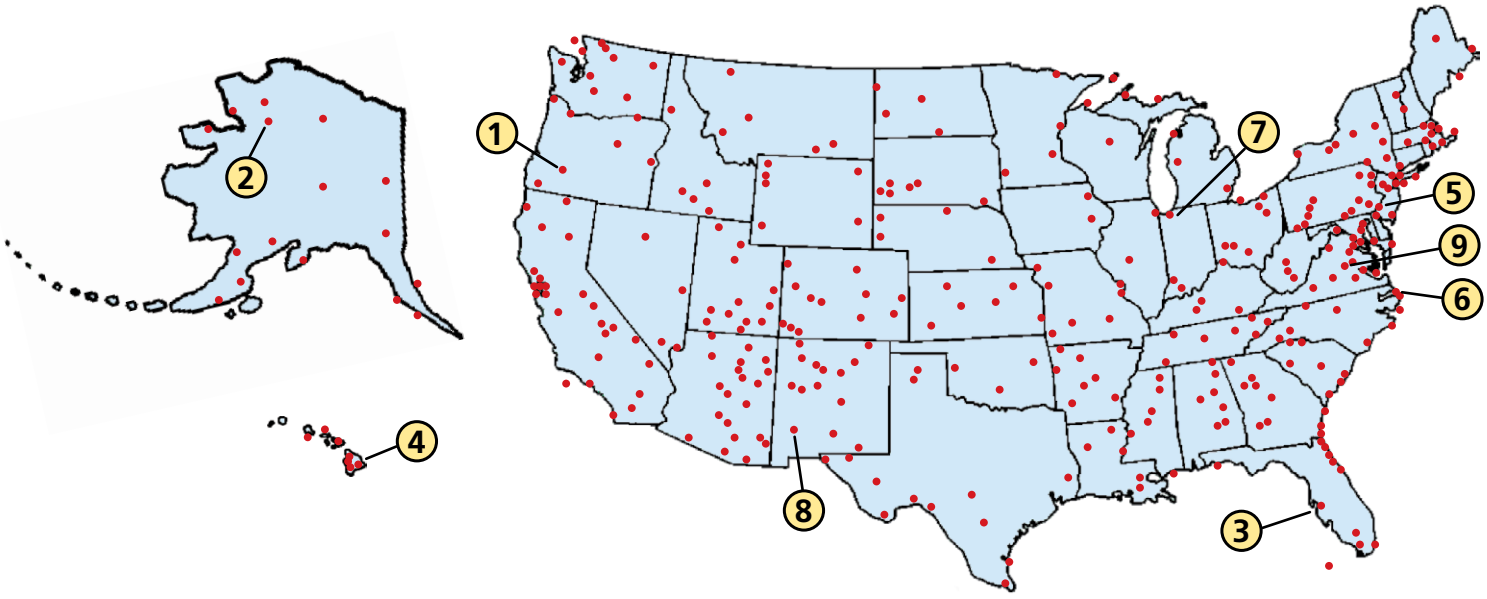
CRATER LAKE
NATURAL HISTORY ASSOCIATION

Parents: Feel free to assist your aspiring Junior Ranger. This is a family program, intended to encourage interactive learning.

Kids: You can also become a Junior Ranger (and earn a colorful patch) by participating in a fun activity at Rim Village (summer only). Check your park newspaper for details.

National Parks Are All Around Us!

The National Park Service protects America's most special places—more than 400 of them, located all across our country. Each park is special for a different reason. Connect the parks named below with a reason they are special.



Crater Lake National Park (1)

Kobuk Valley National Park (2)

De Soto National Memorial (3)

Hawai'i Volcanoes National Park (4)

Edgar Allan Poe National Historic Site (5)

Wright Brothers National Memorial (6)

Indiana Dunes National Lakeshore (7)

Gila Cliff Dwellings National Monument (8)

Maggie L. Walker National Historic Site (9)

- Home to half a million caribou (reindeer)
- Author of "The Raven" lived in this house
- Deepest lake in the United States
- Where Orville & Wilbur flew the first airplane
- People lived in these caves over 700 years ago
- Hot lava is pouring into the Pacific Ocean here
- Home of the first woman to be president of a bank
- Over 1,100 plant species live near these sand dunes
- Spanish explorer Hernando de Soto landed here in 1539

Can you name another national park and one thing that makes it special?

NATIONAL PARK: _____

WHY IT'S SPECIAL: _____

_____

Design Your Own National Park

If you could design your own national park, what would it look like? What special features would it include? Draw your own national park in the space below. Don't forget to write the name of your park on the entrance sign!

Possible features to include:

trees	mountains	picnic tables
flowers	volcanoes	campgrounds
birds	waterfalls	visitor centers
animals	rivers	hiking trails
insects	islands	viewpoints
fossils	geysers	park visitors
caves	glaciers	park rangers
forts	sand dunes	cliff dwellings
cannons	hot springs	ancient pottery

Ranger's Notebook

Park rangers gather information by carefully observing the world around them. Go outside, find a quiet place to sit, and spend 5 minutes observing your surroundings. Record your experience below.

Date: _____ Time of Day: _____

Weather:
- ❒ cold
- ❒ warm
- ❒ hot
- ❒ sunny
- ❒ cloudy
- ❒ calm
- ❒ windy
- ❒ raining
- ❒ snowing

Look around. List four things you can see from this spot:

1) _____ 2) _____

3) _____ 4) _____

Listen. Identify two sounds that you hear:

1) _____ 2) _____

Do you see any birds, animals, or insects? If not, what animals do you think might live nearby?

1) _____ 2) _____

3) _____ 4) _____

Draw a picture of the most interesting thing you see from this spot:

How does being outside at Crater Lake National Park make you feel?

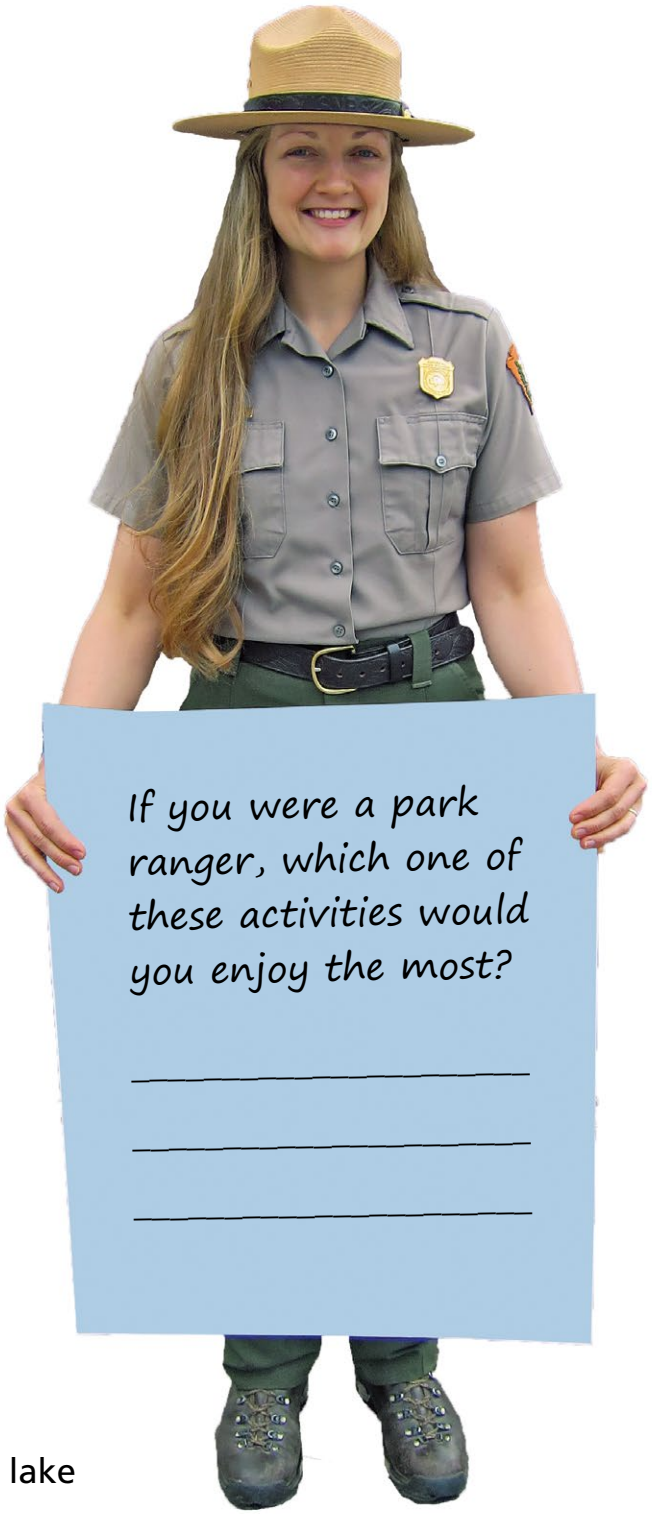
_____

All in a Day's Work

Park rangers protect our national parks in many different ways. Below is a list of jobs that rangers perform at Crater Lake. Cross out the ones that don't belong, and check the ones that do.

Ranger Stephanie's To-Do List:

- [x] help kids learn how Crater Lake formed
- [ ] ~~drive really fast around the lake~~
- [ ] save endangered species
- [ ] feed the bears
- [ ] feed the squirrels
- [ ] build trails for visitors to enjoy
- [ ] throw rocks into the lake
- [ ] rescue lost hikers
- [ ] study animal behavior
- [ ] pick wildflowers
- [ ] pick up litter
- [ ] repair historic buildings
- [ ] harvest wild mushrooms
- [ ] look for signs of volcanic activity
- [ ] write my name on the rocks
- [ ] write articles for the park newspaper
- [ ] allow my dog to run without a leash
- [ ] educate school groups that visit the park
- [ ] lead visitors on guided snowshoe walks
- [ ] remove all the dead trees from the forest
- [ ] remove non-native plants from the park
- [ ] study how climate change is affecting the lake



The Mountain That Became a Lake

We are making a new exhibit for the visitor center, but we mixed up the illustrations. Can you help us number them?

1

It Grew

Half a million years ago, a volcano began to grow here. Each small eruption brought a new layer of lava and ash to the surface. The volcano grew taller and taller. We call it Mount Mazama.

2

It Blew

7,700 years ago, Mount Mazama had its biggest eruption ever. It was very loud and violent. All plants and animals living nearby were killed. Some of the ash traveled all the way around the world!

3

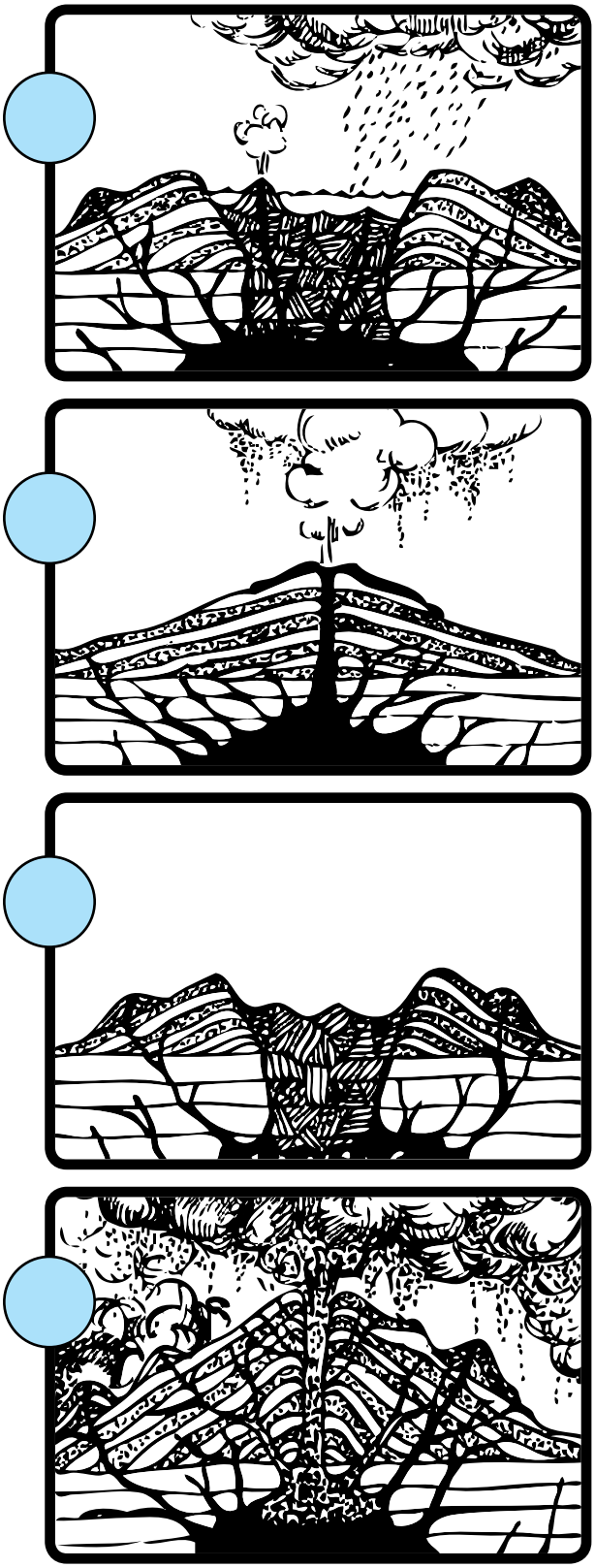
It Fell

Near the end of the eruption, a big hole formed beneath the volcano, where all the lava had been. Suddenly, the top of the mountain fell straight down into the hole! Mount Mazama disappeared!

4

It Filled

Rain and snow began to fill the empty crater. The depth of the water reached almost 2,000 feet! At the same time, a small eruption formed Wizard Island. And that's how Mount Mazama turned into Crater Lake.



An Eruption Story

When Mount Mazama collapsed, people were living nearby. They came up with stories to explain what they saw. This is one story told by the Klamath Indians, who still live near the park. Can you fill in the blanks and finish the story?

Since time began, people have lived in the Klamath Basin, a place filled with rivers, marshes, springs, trees, birds, and _____ .

Not far away, a powerful spirit once lived inside a tall mountain. The spirit was known as the "Chief Of The Below World." One day, he emerged from the _____ at the top of his mountain and looked around. He saw a beautiful maiden with long, black hair. Her name was Loha (low-ha). She was the _____ of the Klamath Chief.

With one look, the Chief Of The Below World fell madly in love. He asked Loha to marry him, but she refused, saying "I don't want to live inside a mountain!"

The Chief Of The Below World became enraged. He swore revenge on Loha and her people. Rising up from his mountain, he threw red-hot _____ into the sky. Giant fireballs shot from his mouth. Fire, lava, and ash rained down on the Klamath Basin, destroying forests and villages. The Klamath people fled in terror and _____ for help.

Use these words to complete the story:

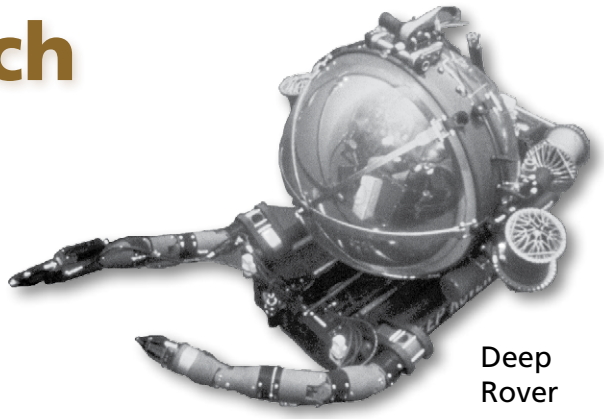
hole
rocks
peace
trembled
fell
daughter
prayed
fish

Another powerful spirit, the Chief Of The Above World, came to the rescue. He flew down from his home in the sky and began to do battle with his rival. The mountains shook and the earth _____ as the two spirit chiefs fought. Finally, the Chief Of The Below World was pushed back down into his hole. And the top of his mountain _____ down onto him!

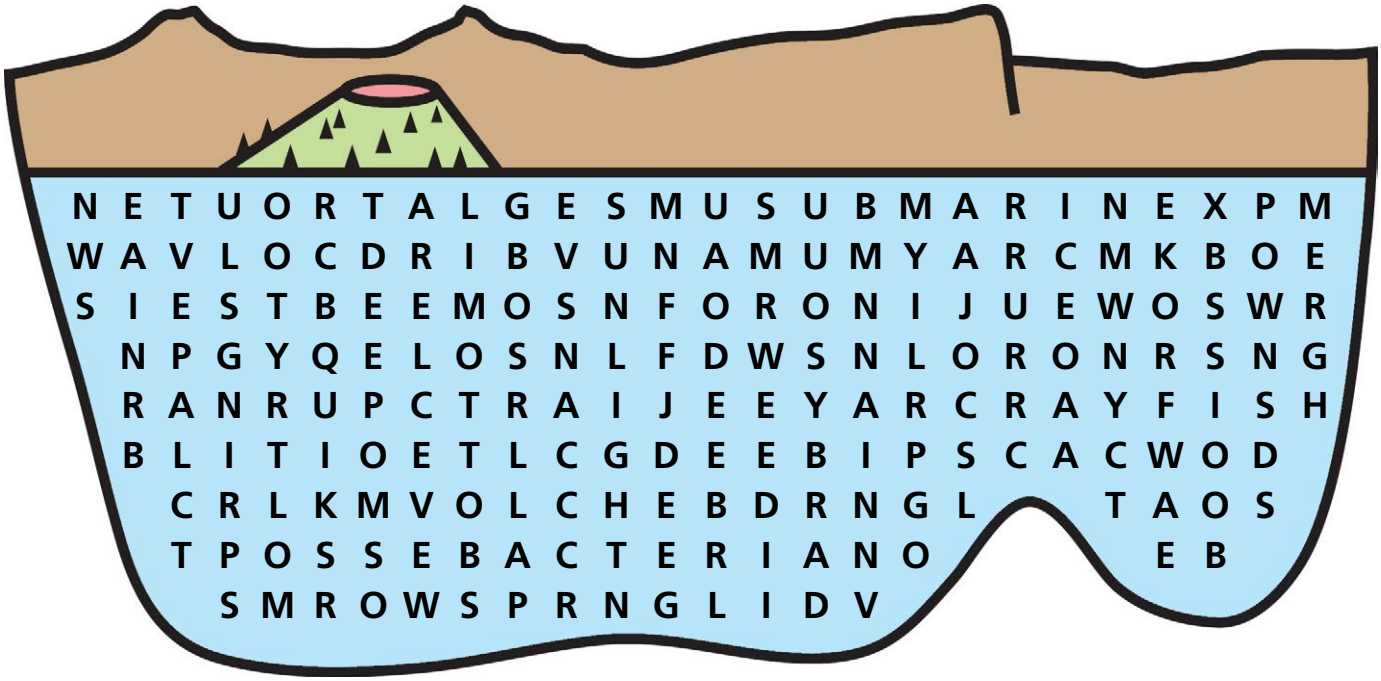
The next morning, when the sun rose, the Klamath people saw that the mountaintop was gone. Soon, rain filled the empty crater with water, and _____ returned to the earth. Never again did the Chief Of The Below World rise up from his home. Never again did he frighten the people.

Submarine Search

In 1988, scientists explored Crater Lake in a submarine. They discovered some amazing things. How many can you find? Fill in the blanks below, then look for those words in the lake. Search down, up, across, backwards, and diagonally.



Deep Rover



Deep Rover is the name of the **S** _ _ _ _ _ _ _ _ that explored Crater Lake.

The lake looks blue because it is very clean and very **D** _ _ _ .

The water is clean because it comes from **R** _ _ _ and **S** _ _ _ , not rivers or streams.

Underwater, along the shore, live **S** _ _ _ _ _ with spiral shells.

Two kinds of non-native fish swim in the lake: Rainbow **T** _ _ _ _ and Kokanee Salmon.

Non-native **C** _ _ _ _ _ _ _ , which look like baby lobsters, also live in the lake.

Even at 460 feet deep, there is still enough **S** _ _ _ _ _ _ _ for plants to grow.

The biggest plant is a carpet of green **M** _ _ _ that grows on the rocks underwater.

Deep Rover collected rock samples from Merriam Cone, an underwater **V** _ _ _ _ _ _ .

Scientists explored all the way to the **B** _ _ _ _ _ , which is 1,943 feet below the surface.

There they discovered warm **S** _ _ _ _ _ _ , where water enters the lake from below.

Colonies of yellow **B** _ _ _ _ _ _ _ live around these hydrothermal vents.

Scientists even spotted tiny **W** _ _ _ _ crawling on the floor of the lake.

Poetry in the Park

The beauty of Crater Lake inspires people to sing, dance, draw, and write. Think about something you have noticed or experienced at Crater Lake, then write a poem using the letters of the word "crater" to begin each line.

C _____

R _____

A _____

T _____

E _____

R _____

Here are some poems that other people have written:

Crater Lake
Really pretty
All my family
Together
Experiencing
Real nature

Chipmunks & squirrels
Running
Around the park
They are so cute
Eating seeds and nuts
Remember not to feed them!

Calm, blue water
Resting inside a volcano
A long time ago
The mountain caved in!
Eventually
Rain & snow made a lake

An A-maze-ing Bird!

Whitebark Pines are beautiful trees that grow on the rim of Crater Lake. Did you know that each one was planted by a bird? Make your way through the maze to find out more.

START

You are a Clark's Nutcracker. You have a long beak, perfect for removing seeds from pine cones.

You bury the rest of the seeds a few inches deep in the soil. This is a lot of work! You hide about 35,000 seeds every summer.

Where should you store your extra seeds? You decide to hide some of them under a rock. You concentrate hard to memorize the location.

You fly to the top of a Whitebark Pine. Its seeds are very tasty. Yum! But you can't possibly eat them all. You fly away, carrying 100 extra seeds in your mouth.

Sorry—no seeds here!

Look! A grove of young Whitebark Pines. Each one grew from a seed that a Clark's Nutcracker forgot to dig up.

Sorry—no seeds here!

Uh-oh! Winter is here. There are no more seeds in the Whitebark Pine cones. You are getting hungry! Can you remember where you put your extra seeds?

Fortunately, you have an excellent memory. You recall hiding some seeds last summer in this cave. Sure enough, they are right where you left them! You eat them and survive the winter.

FINISH

Winter Scramble

When winter arrives, animals at Crater Lake must scramble to survive. Some change their behavior, some change their diet, some change their color, and some change their location. Solve the scrambled words, then draw a line to match each animal with its winter adaptation.

In the winter, the snow at Crater Lake can be over 10 feet deep—too deep for me to graze on grass. That's why, before winter comes, I leave the park. Scientists call this behavior...

M _ _ _ _ _ _ _ _
R I T G A I N O

Winters here are cold! My brown fur looks warm, but to keep from freezing I dig tunnels deep into the snow and huddle together with members of my family. The snow above us acts like a warm...

B _ _ _ _ _ _
E N T K A L

In the summer, I eat flowers and grasses. In the winter, I'm forced to eat tree bark and evergreen needles. Fortunately, my big hind feet allow me to hop on top of the snow without...

S _ _ _ _ _ _
G N I K I N

In the summer, I run around eating seeds. To survive the winter, I burrow into the ground. I lower my temperature and heart rate to save energy. It looks like I'm asleep! Scientists call this...

H _ _ _ _ _ _ _ _ _ _
E T N I B I N R O A

In the summer, my fur is brown. In the winter, I grow a white coat—the color of the snow! It keeps me hidden from my prey, as well as from predators such as bobcats and owls. My fur is an example of...

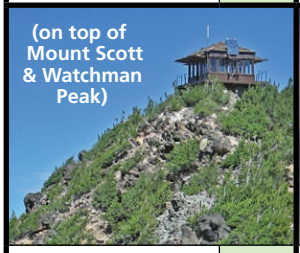
C _ _ _ _ _ _ _ _ _
U G A F L A M E O

All summer long, I gather seeds and insects. I glue them (using my sticky saliva) to tree trunks around the park. In the winter, I fly from tree to tree and eat my stored snacks. So, I survive the winter by...

P _ _ _ _ _ _ _ _ A _ _ _ _ _
A I L G N N N E H A D

More-Than-a-Lake Bingo

There is more to this park than just a lake! How many of these other features can you spot? Each time you find one, mark it with an X. Find five in a row to make bingo.

Crater Lake Lodge	Marten	Mosquito	Northern Spotted Owl	Wizard Island
Snow	Park Ranger	Mountain Hemlock	Crater Lake License Plate	American Flag
Deer	Black Bear	**FREE SPACE**	The Moon	A Yellow Wildflower
Gray Jay	Clark's Nutcracker	Tour Boat	Marmot	Phantom Ship
 Fire Lookout	Dragonfly	Ground Squirrel	Chipmunk	Pumice Castle