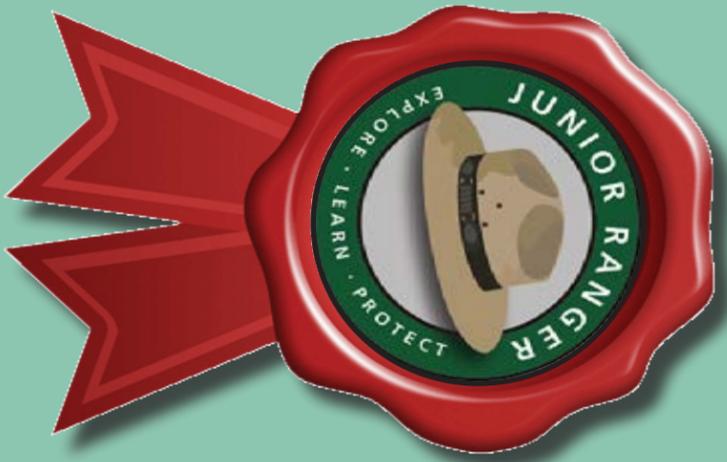
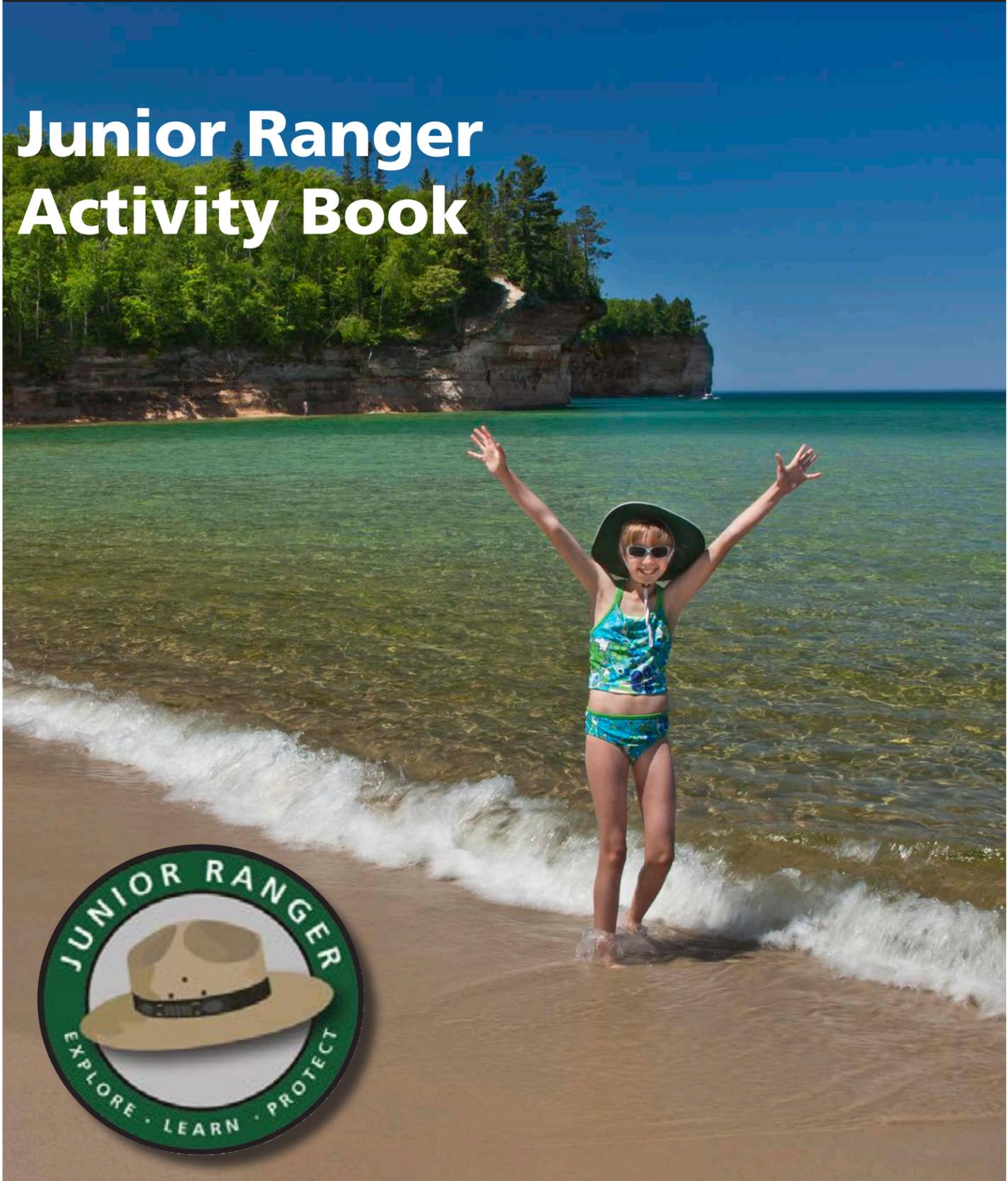




# Pictured Rocks National Lakeshore

## Junior Ranger Activity Book



Pictured Rocks National Lakeshore

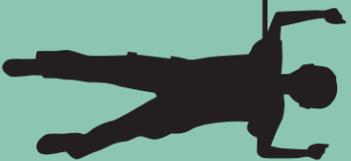
# Junior Ranger

## Certificate of Completion

*Presented to:*

Junior Ranger

Issuing Park Ranger



## Welcome to the Pictured Rocks National Lakeshore Junior Ranger Program!

Being a Junior Ranger means more than just completing this booklet. Being a Ranger is a way of life. It is a life that enjoys exploring the outdoors safely. It's a life that believes in living lightly on the land and learning about our natural and cultural resources - plants and animals, historic buildings and archeological sites. A good Ranger helps take care of these things.

### How do I become a Junior Ranger?

It's easy! Just complete your section of the book by exploring the park, talking with Lakeshore staff, reading park information, and by attending Ranger-led programs. Your parents can help, but please don't let them tell you the answers! Find them on your own!

When you have completed the book, take it to a Lakeshore visitor center and have the Park Ranger review your work and sign your certificate. You will then receive your own Junior Ranger badge.



Ask a Ranger how many National Park Service areas there are.

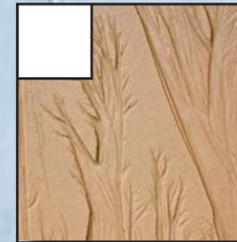
## Grains of Sand

Visit a beach in the Lakeshore. Feel the sand, and listen to the sound of the waves. Beach sand is made up of tiny rocks which are broken down from much larger rocks, then shaped by wind, rain, ice, and water. Number the steps below to show the order in which sand is formed.

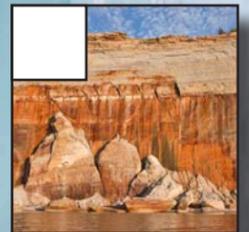
Rocks and pebbles lie on the beach



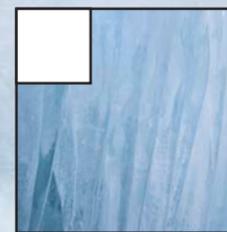
Eventually, the smallest pieces are grains of sand



Sandstone bedrock makes up the Pictured Rocks cliffs



Bedrock was ground up by ancient glaciers that were once here



Waves and ice grind the rocks into ever smaller pieces



Ask a Ranger about the safety equipment they use.

# The Ancient Ones

Anishnabe or Chippewa Indians have lived here for hundreds, if not thousands of years. Their symbol is a circle with four colors - each representing a cardinal direction. With a line, match the color with the appropriate direction.

West

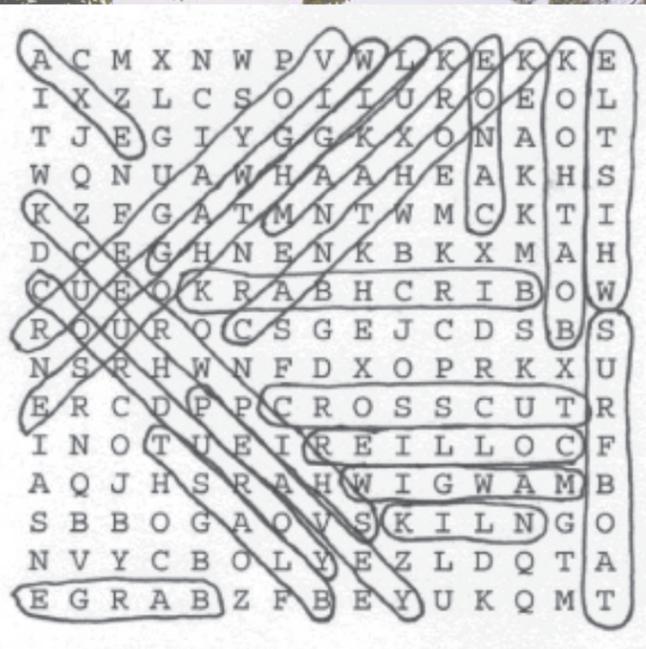
North

East

South



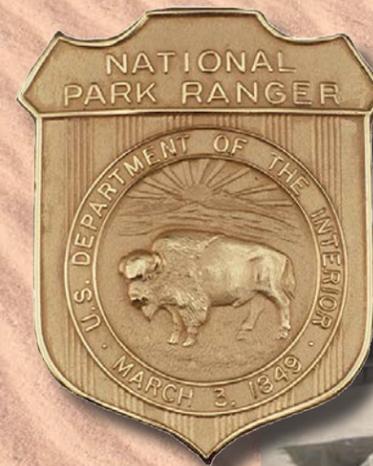
## Word Search Key



Ask a Ranger about their favorite activity.

Images © Craig Blacklock - "Pictured Rocks - From Land and Sea"

# The National Park Service



The National Park Service was established in 1916 to preserve and protect the natural and cultural resources and values of the National Park System for the enjoyment, education, and inspiration of this and future generations.

As of 2013, there are nearly 400 park areas across the country. Five of them are located on Lake Superior.

To become a Junior Ranger, you must explore, protect, and learn about the Lakeshore.

*To earn your Junior Ranger badge,*  
**Age 5-9: complete six activities**  
**Age 10-12: complete ten or more activities**



While out in the park...  
 Ask a Ranger what the first National Park was.



# Attend a Ranger Program

I have attended at least one ranger program (programs are listed on the park website, in the park newspaper, and on bulletin boards.)

The Ranger program I attended was:

---

One thing I learned at the program was:

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The program was held at:

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When I get home I will \_\_\_\_\_ because of this program.

Park Ranger signature: \_\_\_\_\_

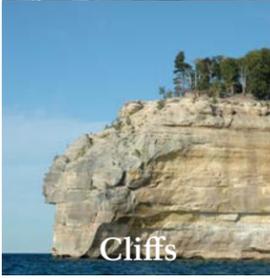
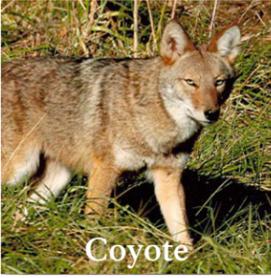
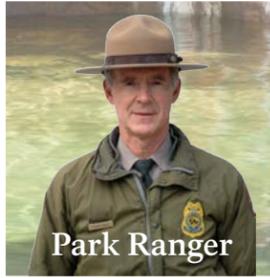
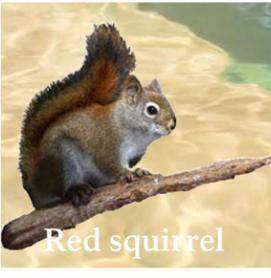


Ask a Ranger about how they help protect the Lakeshore.



# Lakeshore Bingo

Use your detective skills to look for, but not collect, things pictured below. Each item is something interesting found at Pictured Rocks National Lakeshore. If you cross off four in a row, you have a BINGO!

 Bulletin board	 Cliffs	 Bald eagle	 Spider
 Coyote	 Recycle symbol	 White pine	 Ranger vehicle
 Lake Superior	 Deer track	 Park Ranger	 Beach stones
 Red squirrel	 Maple leaf	 Wild flower	 Fish



Ask a Ranger about their favorite part of the park.



# Things Are Always Changing

Things are always changing in the park. What is here today, may be gone tomorrow. What was small last year, may be huge next year. As you visit the Lakeshore, list and draw things that are...

Older than you \_\_\_\_\_

Smaller than you \_\_\_\_\_

Something with wings \_\_\_\_\_

Rough to the touch \_\_\_\_\_

Wet and slimy \_\_\_\_\_

Something warm \_\_\_\_\_

Something really smooth \_\_\_\_\_

An object cold to the touch \_\_\_\_\_

There is always something new and different in nature. Be careful with each item you identify, and make sure to leave it in the park when you go.

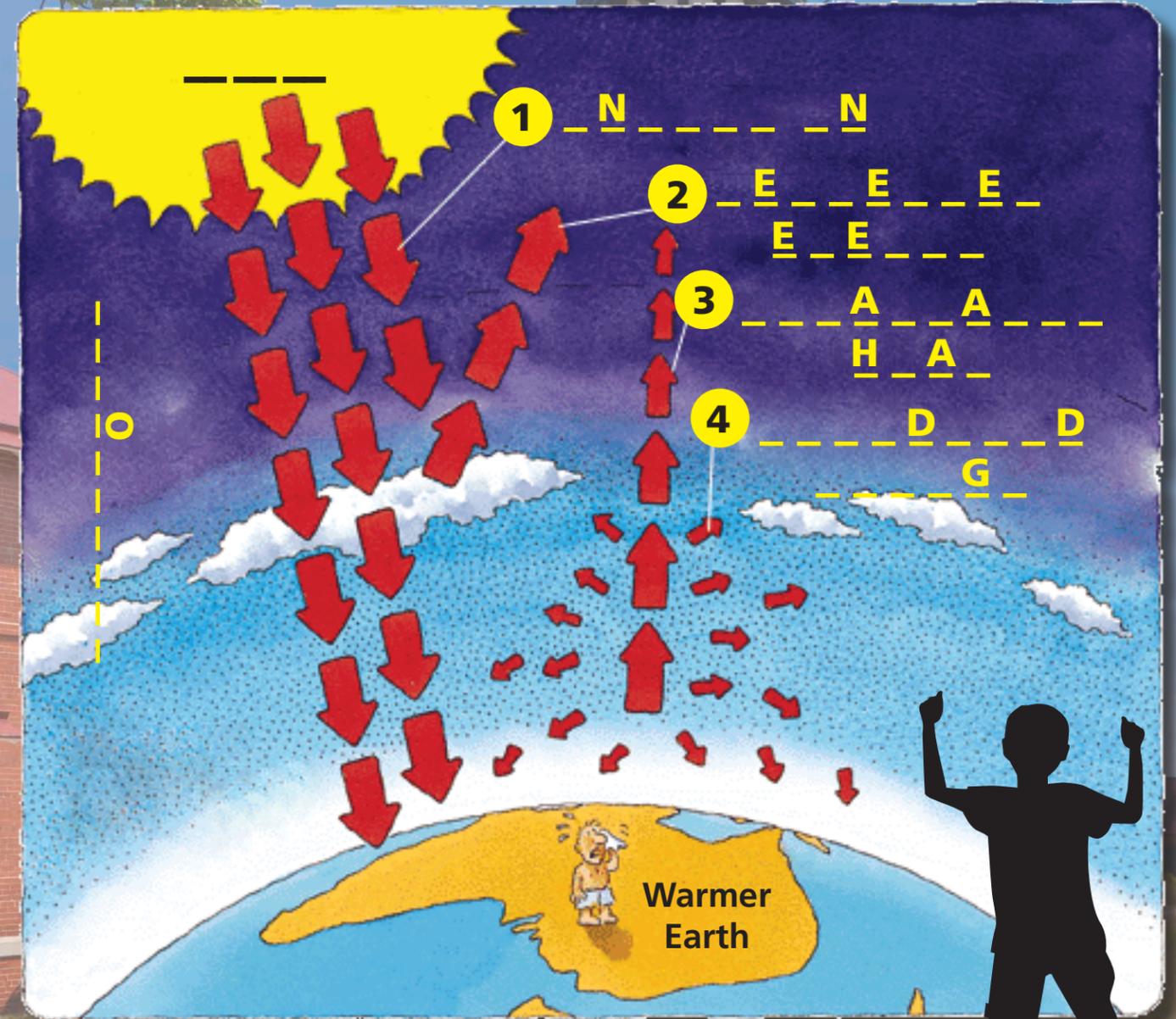


Ask a Ranger about the shipwrecks in the park.

# A Changing Climate

Things are changing in Earth's atmosphere as well as in the park. Humans have burned fossil fuels over hundreds of years releasing off Carbon Dioxide (CO<sub>2</sub>). CO<sub>2</sub> is responsible for the "greenhouse effect" that has warmed the Earth. From the word list, fill in the blank words below.

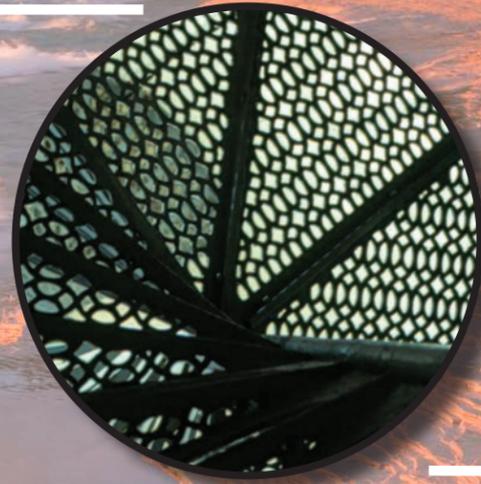
Atmosphere      Energy Out      Reradiated Energy  
Energy In      Reflected Energy      Reradiated Heat      Sun



Ask a Ranger about Lakeshore wildlife.

# Find the Mystery Photo Place

What is the picture of? Where were these photos taken?

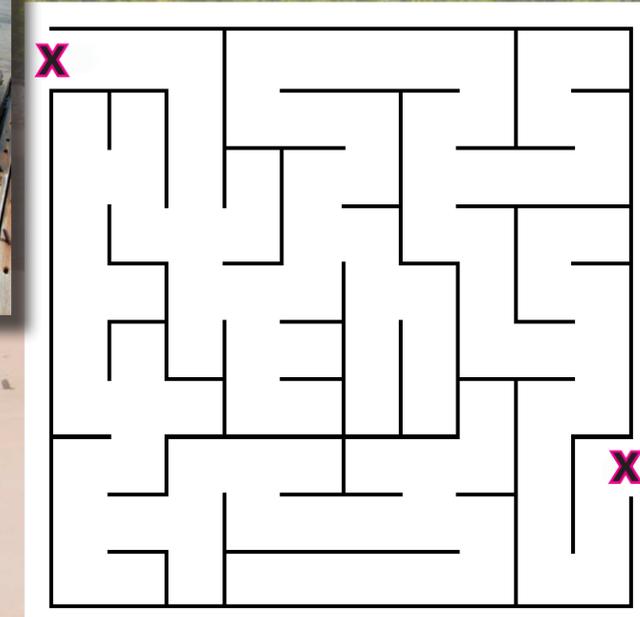


Ask a Ranger about weather at the Lakeshore.

# Shipwreck Maze!



Au Sable Light Station



Cleveland, Ohio

The 277 foot long bulk freighter *Gale Staples* wrecked on Au Sable Point on October 1, 1918. She was upbound for Port Arthur, Canada, loaded with a shipment of coal. High winds and waves drove her onto the point where she ran aground and broke up in plain view of the Au Sable Light Station. No lives were lost on this wreck, though the ship was a total loss.

Please remember that all shipwreck remains are protected by law and cannot be removed from the park.



Ask a Ranger about how to "Leave No Trace."

# Stretching Your Senses

You have five senses you use to explore your environment: sight, hearing, touch, smell, and taste. Using your four senses (we recommend you don't taste what you do not know, unless it's your lunch!), sit quietly in the park. Look, listen, smell, and feel to help you complete the following sentences.

The colors of the cliffs *look*:

---

---

---

Today, the air *smells*:

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---

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The wind along the lake *sounds*:

---

---

---

The weather today *feels*:

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---

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How do YOU feel being here today:

---

---

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Ask a Ranger about how to store your camping food.

# Gather Your Gear

It's time to think about your next trip to Pictured Rocks National Lakeshore. See if you can find some useful things in this picture and circle them. Then find some things that would be better left at home and cross them out. Be ready to tell a Ranger why.



Ask a Ranger about "Magic Spots" in the park.

# Interview a Park Employee

While visiting the park, take a few minutes to talk with a Park Service employee. These folks do a variety of jobs in the park to help serve visitors and protect park resources. Meet as many different kinds of rangers as you can. What kinds of jobs do we do? Draw a line to connect us with our work.



Maintenance workers keep up the trails, repair buildings, maintain roads, water, electrical, plumbing, and heating systems.



Science and Natural Resources staff inventory and monitor the many plant and animal species in the park. They also keep track of how these individual creatures interact within the ecosystem.



Resource and Visitor Protection rangers assist injured visitors, fight wildland fires, perform search and rescue, and patrol the park for activities that harm the resources.



Administrative staff keep the business of the park running, including equipment purchasing, payroll, staff hiring, and budget.



Heritage Education rangers provide interpretive programming, visitor orientation and information, and school programs.

## Interview Questions:

1. What did you study in school to become a Park Service employee?  
\_\_\_\_\_
2. What is your favorite part of the job you do?  
\_\_\_\_\_
3. Why is the National Park Service important to our nation's natural and cultural heritage?  
\_\_\_\_\_  
\_\_\_\_\_



# Haiku Cove

Think of what you would like to remember most about your visit to Pictured Rocks. Write a nature poem about it using the "haiku" format. Haiku is a traditional Japanese form of poetry about nature. Haiku have been written for hundreds of years. Unlike some forms of poetry, haiku does not rhyme.

Line 1: 5 syllables (or "beats")  
Line 2: 7 syllables  
Line 3: 5 syllables

## Example

Rock | fall, | waterfall  
all | things | tumble | to | the | lake,  
to | Superior!

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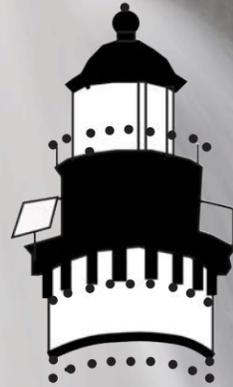


Ask a Ranger what they studied in school.



# Connect the Dots

The Au Sable Light Station shines a light 17 miles out over the lake to help boats steer clear of shallow water. Before they were powered by electricity, lighthouses had a "keeper" who tended oil lamps. The keeper kept the light burning for the people on ships. Now, lighthouses are automated (they operate without people living there). Ships also use radar and global positioning systems (GPS) to navigate. Lighthouses like the Au Sable Light Station are a reminder of our history and how much things change! Complete this dot to dot, then color it.



Ask a Ranger about the work they do.

# History Word Search

The Lakeshore has a rich human history. American Indians, explorers, fur traders, lumberjacks, sailors, lighthouse and rescue crews have shaped the stories of the park.

Find and circle the following words that tell these stories.

- Anchor    Axe    Barge
- Birchbark    Boathook    Canthook-
- Canthook    Collier    Corduroy
- Crosscut    Kiln    Lighthouse
- Peavey    Shipwreck    Surfboat
- Voyageur    Wigwag    Wigwam

Some words may appear backwards. Answers on page 18.



Ask a Ranger about some of their specialized skills.



# A Dark Lakeshore Sky

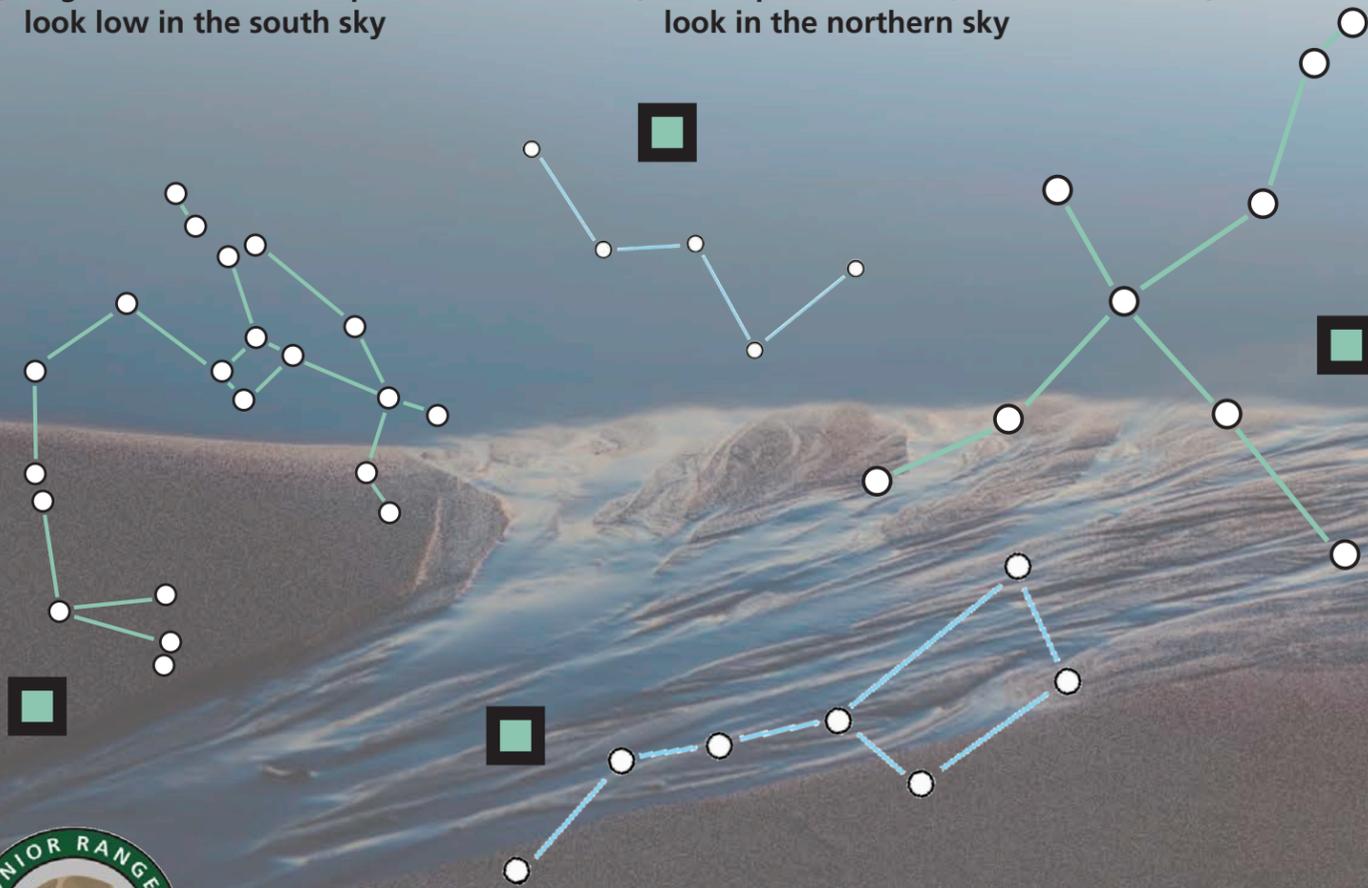
National Parks are great places to get to know the animals that are nocturnal - wildlife that is awake at night and asleep during the day. Sit quietly and listen for these creatures. What sounds do you hear?



Look for the Milky Way stretching across the night sky. What looks like a faint cloud, is actually the light from billions of distant stars. The Milky Way is our home galaxy.

From an open area look for the following summer constellations, then number the drawings:

- 1) The Big Dipper or "Great Bear" look in the northern sky
- 2) Cygnus or "The Swan" look overhead
- 3) Sagittarius or "The Teapot or Archer" look low in the south sky
- 4) Cassiopeia or the "Queen in Her Chair" look in the northern sky



# Dark Skies - To Do At Home

- Sleep in your backyard on a starlit night.
- Make a red flashlight. Use red paper or cellophane to cover a white flash light lens. This will help you navigate at night without affecting your night vision.
- Can you see the stars as well in your backyard with the porch light on? Ask someone to help you try different light bulbs, even different light fixtures, so that you can see the stars better.



Ask a Park Ranger about the best place to see the night sky.