

Isle Royale

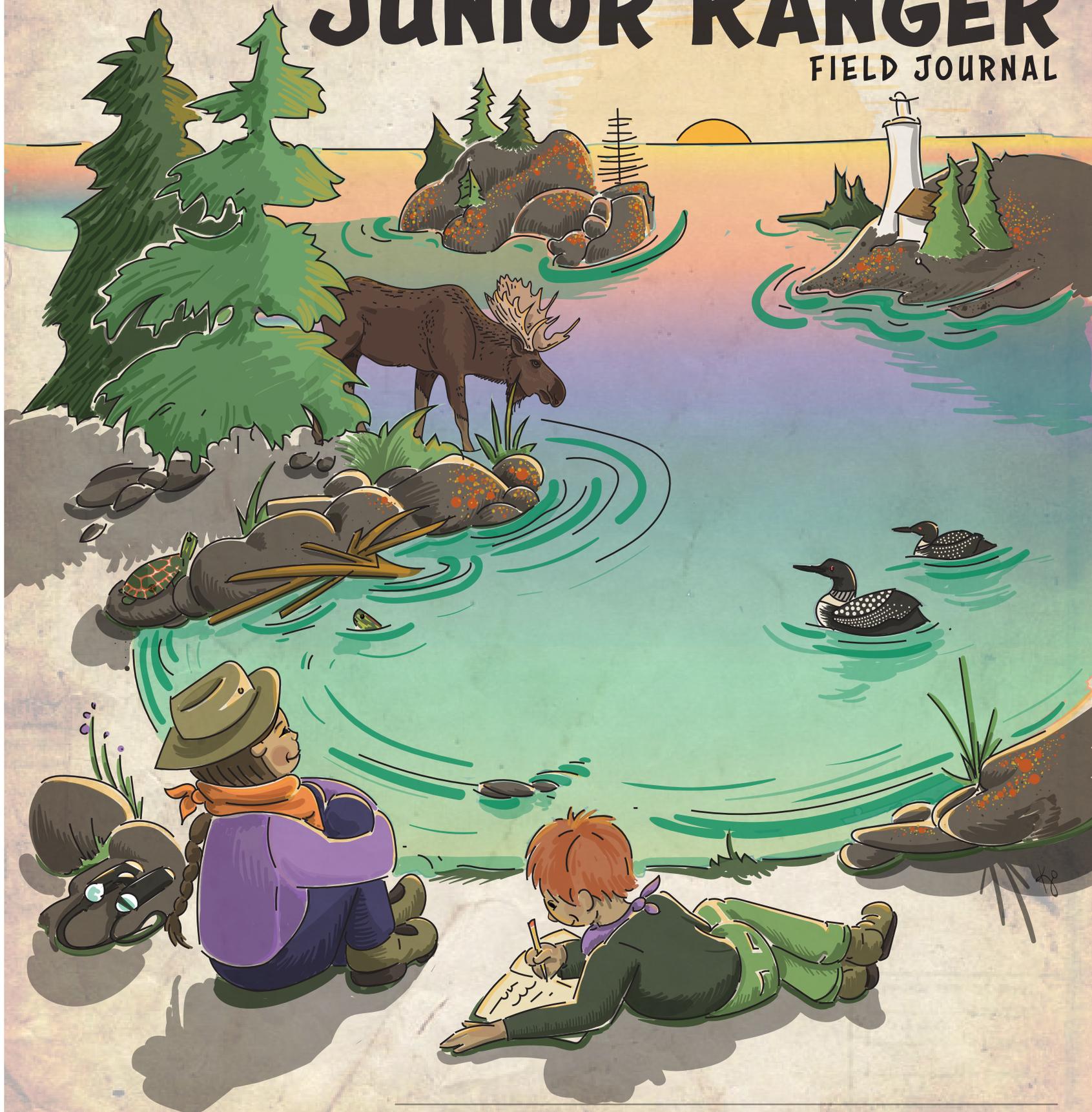
National Park Service
U.S. Department of the Interior

Isle Royale National Park
Michigan



JUNIOR RANGER

FIELD JOURNAL



THIS JOURNAL BELONGS TO _____

Welcome, Junior Ranger!

Isle Royale National Park is a wild place. The park consists of over 400 islands, and even includes part of Lake Superior. At Isle Royale you can connect with nature, make memories, and discover more about yourself. Use this journal to have fun, explore Isle Royale, and learn what you can do to protect the park.

How can you become a Junior Ranger?

Work on Your Journal

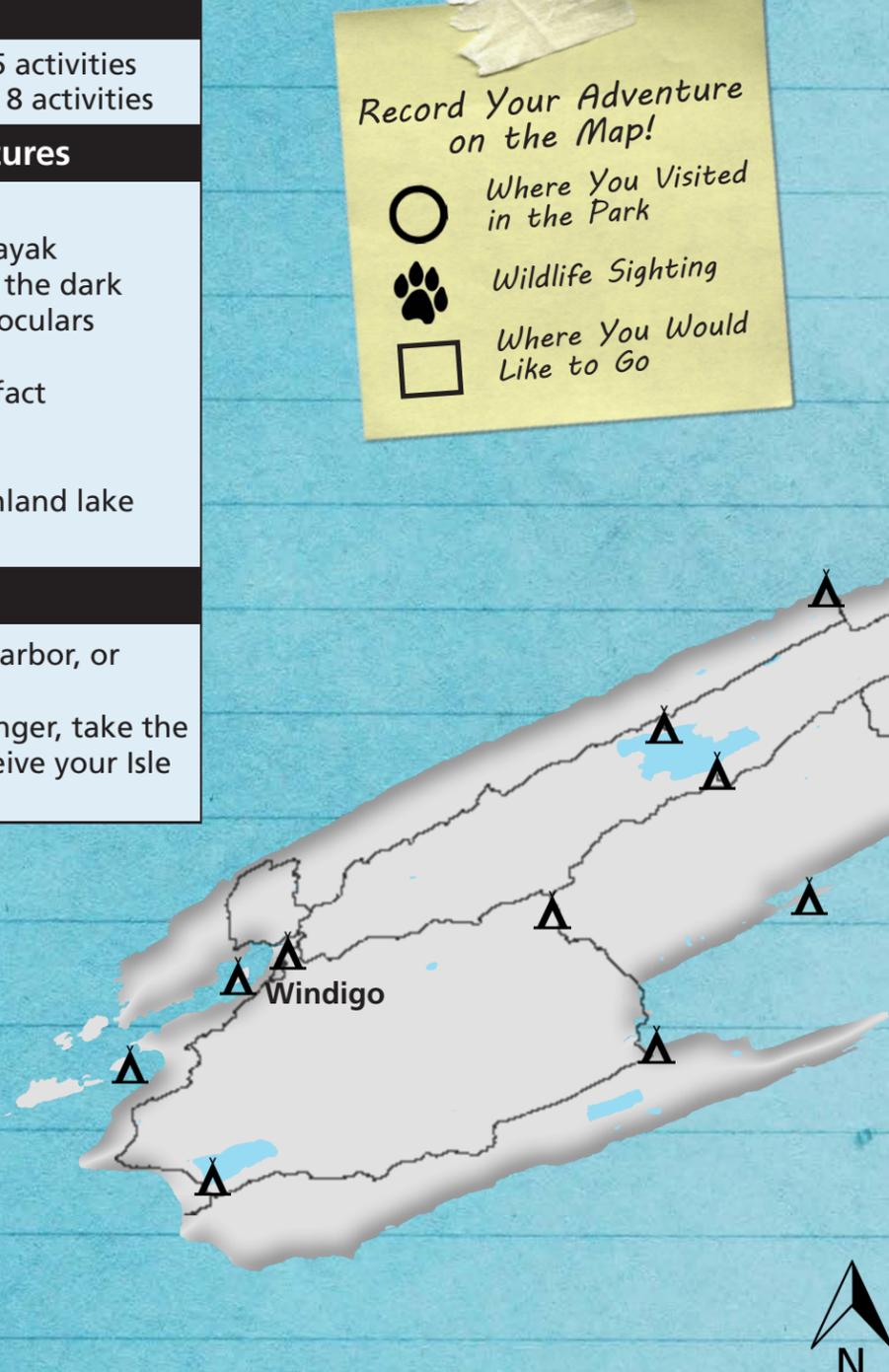
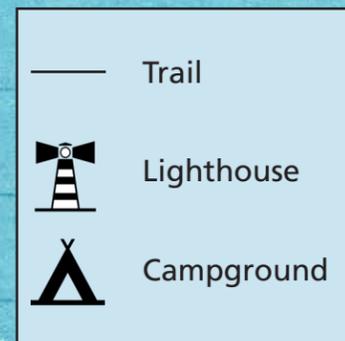
- Ages 6-8: Complete at least 5 activities
- Ages 9-12: Complete at least 8 activities

Go on at Least Two Adventures

- Take a hike
- Explore by boat, canoe, or kayak
- Spend 10 minutes outside in the dark
- Observe something with binoculars
- Jump in Lake Superior
- Explore a historic site or artifact with your eyes
- Spend a night in the park
- Fish in Lake Superior or an inland lake
- Attend a Ranger Program

Become a Junior Ranger

- Go to the Houghton, Rock Harbor, or Windigo Visitor Center
- Share your journal with a ranger, take the Junior Ranger oath, and receive your Isle Royale Junior Ranger badge



Your Crossing

Lake Superior is the world's largest freshwater lake. Everyone must cross it to reach Isle Royale. How did or might you travel to the park? Circle your way below.



Ferry



Seaplane



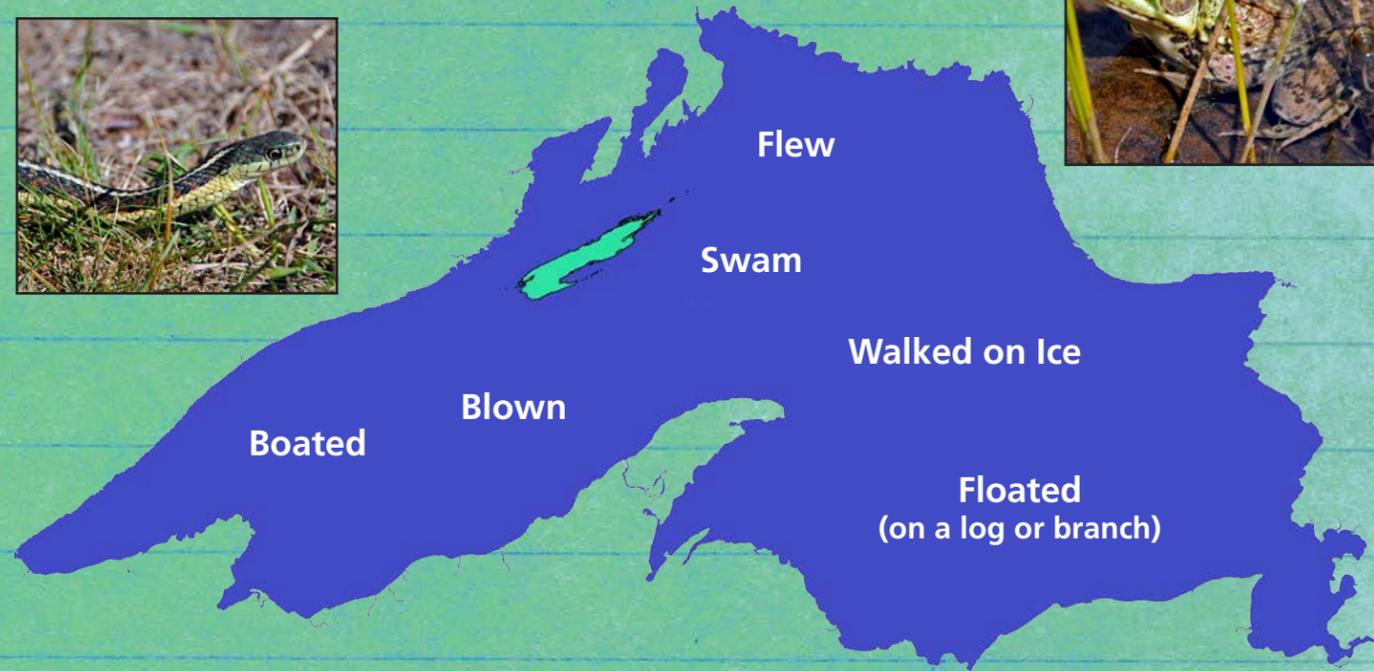
Sailboat or Powerboat



Write 3 words that describe the weather conditions as you crossed Lake Superior. If you have not traveled to Isle Royale, describe what your crossing might be like.

Island Isolation

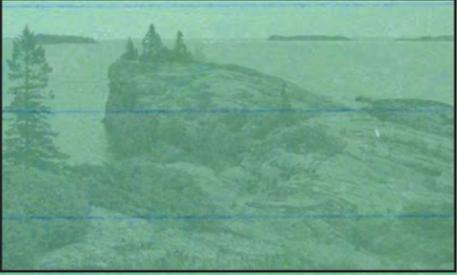
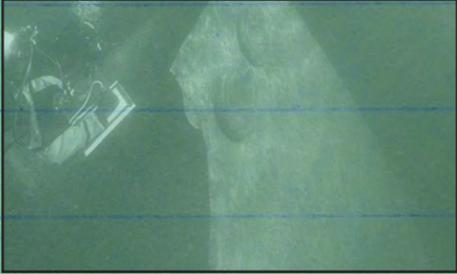
How did wildlife and plants get to the island? Scientists do not know for sure. Draw a line from each animal or plant to your best guess of how they arrived at Isle Royale. Some answers may be used more than once.



Name one plant or animal that you are surprised does not live on Isle Royale. Do you think it might live here someday in the future? If so, how might it arrive?

Isle Royale Invaders

Isle Royale is being invaded, but not by what you might expect. These invaders are plants and animals that belong somewhere else. When invasive species come to the island, they can take water, food, and space that native species need to live. This is bad news for the plants, fish, and other creatures that call Isle Royale home. How might invasive species change Isle Royale?

Before	Invader Arrives!	After
 <i>Native plants on shoreline</i>	 Each plant has 1000 seeds! <i>Spotted knapweed arrives</i>	 <i>Draw what might happen</i>
 <i>Diver on America shipwreck</i>	 One mussel can make 100,000 eggs in a year! <i>Zebra Mussels arrive</i>	 <i>Draw what might happen</i>

Invasive Species Prevention Plan

Think about how invasive species travel to Isle Royale.

Draw or write your plan to help rangers prevent their arrival.

Time Traveler

Where did the rocks on Isle Royale come from? Why does the landscape look the way it does today? Become a geologist and travel through time to investigate how fire and ice have shaped this place by searching for evidence. If you are on the mainland, investigate the area around you.

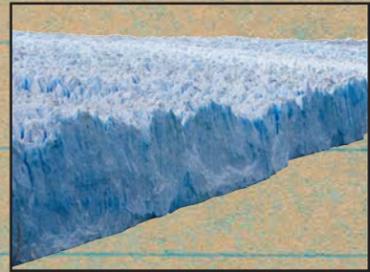


Red hot lava covered this area.

1 Billion Years Ago

Look for a gray rock. This is likely a piece of a lava flow.

Examine, then draw your rock.



Glaciers scraped across the land like giant bulldozers.

2 Million Years Ago

Go up to the highest place you can find.

Were the glaciers strong enough to wear down the ridge that you are standing on?

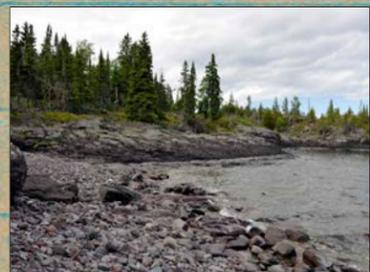


Glaciers finally melted.

10,000 Years Ago

Go to the shoreline.

Where do you think all that ice went when the glaciers melted?



Isle Royale's land is still changing today.

Today

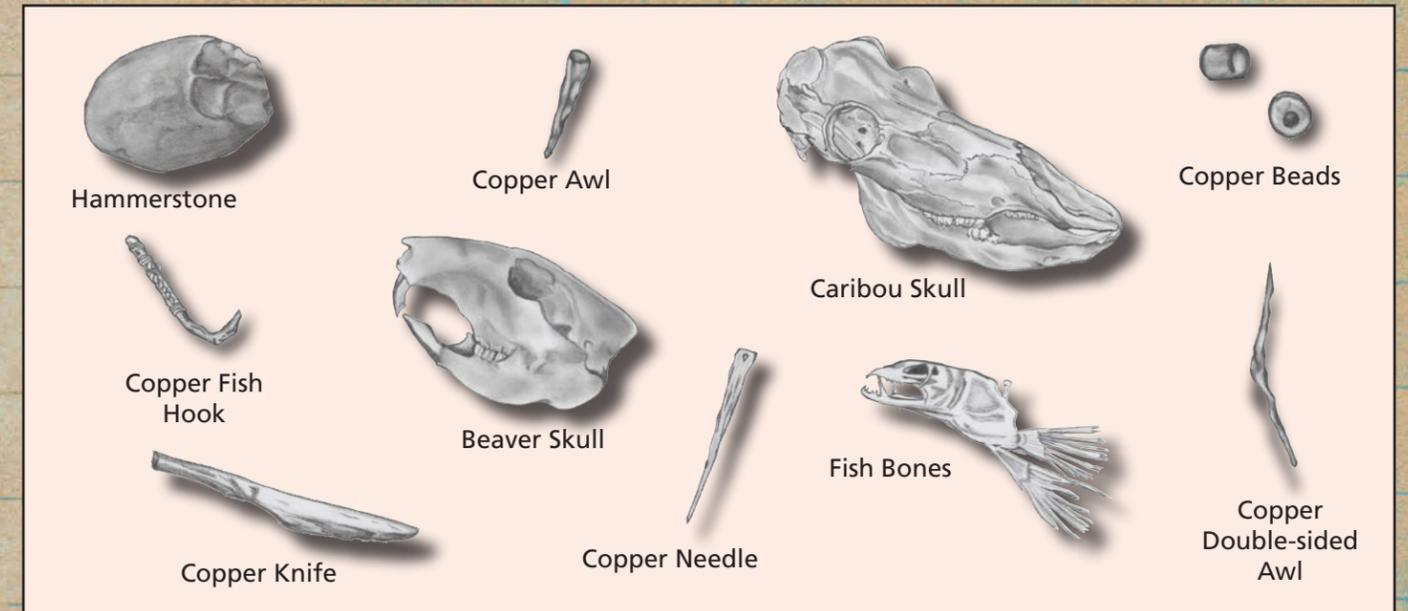
Find evidence that the land is changing.

Draw what you find.

Past Clues

Archaeologists study the things people left behind to learn how they lived. On Isle Royale, archaeologists find things from American Indians who came here thousands of years ago.

Here are a few artifacts – things made by people – and other items left behind by the island's first visitors. They are important clues about what they did on Isle Royale.



- Using these clues, can you figure out what these people ate?
- Name the raw material they used to make their tools and jewelry. They found this material on Isle Royale.
- Which tool shown above did they use to get this material?
- If an archaeologist came to your house, what would your things tell them about you and your family? Write or draw your answer.

Wildlife Watcher

Isle Royale is a great place for researchers to study animals. Become a researcher. Your mission: to observe signs and behavior of animals.

Be on the lookout for critters of all shapes and sizes! Search high, search low. Look up close, and off in the distance. You might also find clues that animals have been in the area – like tracks, nests, holes, scat (poop), and chew marks.

Record all of your observations below in your research notes.

Draw your evidence

Who left this evidence?

What were they doing?

Draw your evidence

Who left this evidence?

What were they doing?

Draw your evidence

Who left this evidence?

What were they doing?

Draw your evidence

Who left this evidence?

What were they doing?

Your observations are now recorded. Do you have questions about what you found? Think like a researcher. Use one of the question words below to ask your research question.

Who...?

What...?

When...?

Where...?

Why...?

How...?

Research Question

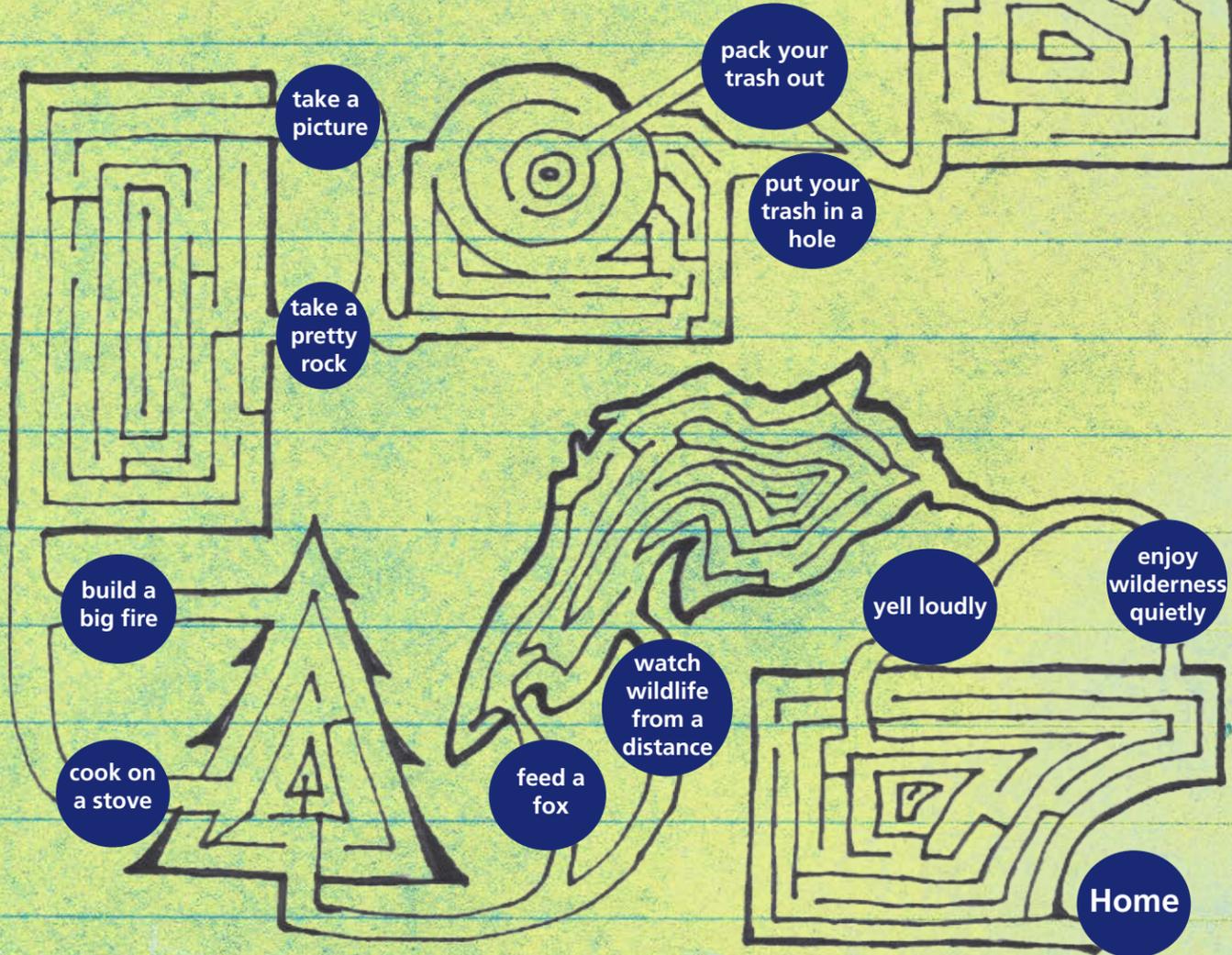
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Into the Wild

Junior Rangers help protect Isle Royale's wildlife and plants by taking care of the island. They also share with others how to take care of the park. One way you can take care of Isle Royale is by following the seven ideas of *Leave No Trace*.

1. Plan ahead and prepare
2. Travel and camp on durable surfaces
3. Respect wildlife
4. Dispose of waste properly
5. Minimize campfire impacts
6. Leave what you find
7. Be considerate of others

Apply these ideas in the maze. Choose those ideas that best help protect Isle Royale to find your way home.

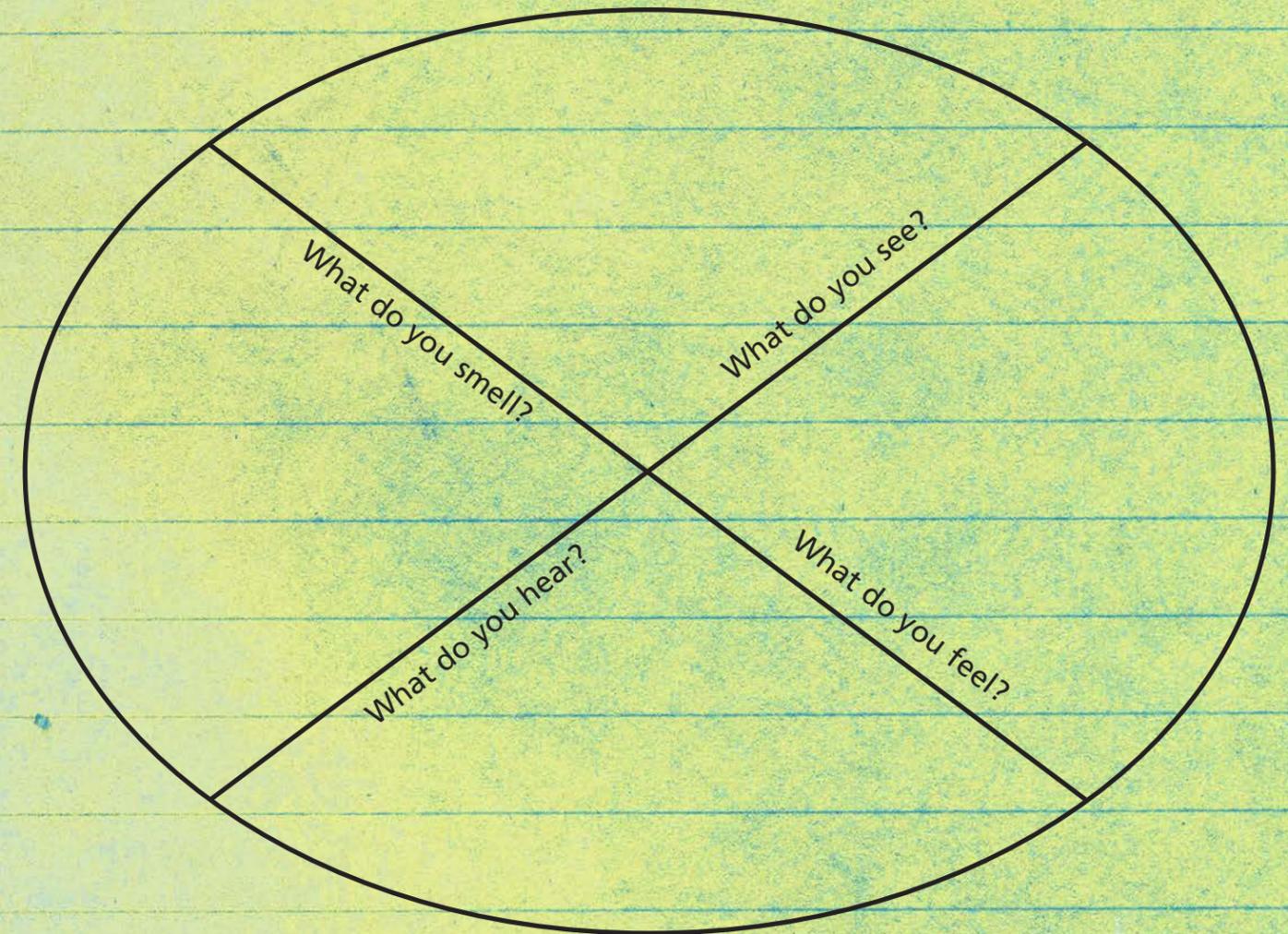
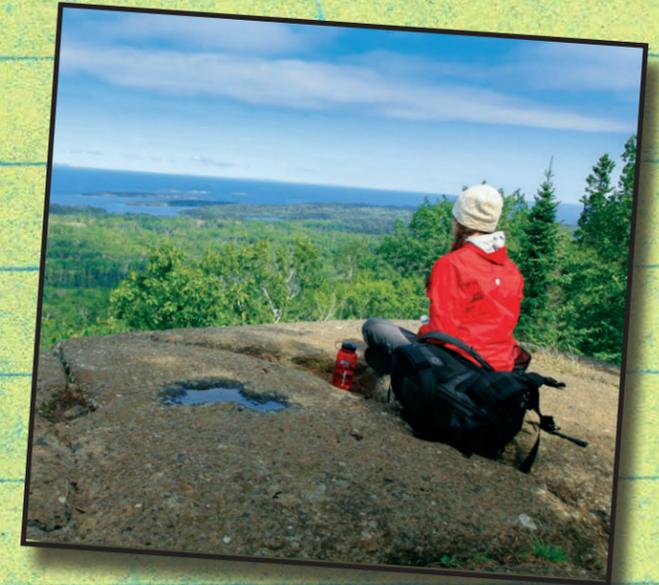


Sensing Wilderness

Isle Royale is wild! More than 99% of the land is WILDERNESS – a special place where people are just visitors; there are no roads or buildings.

Go out for a walk in the wild wherever you are. Select a special spot and sit quietly. Try to be as still as you can. Look, listen, smell and feel the wilderness that surrounds you. Record your observations.

Remember, when exploring wilderness, you should leave it the way you found it.



Lighthouse Living

More than a hundred years ago, John Malone was a lighthouse keeper on Isle Royale. His wife and eleven children lived with him. No grocery stores were on the island, so the children collected gull eggs, fished, and picked berries. There were no televisions or computers, so the Malone kids played musical instruments and made up games.

Imagine you are one of the Malone children. Write a letter to a friend. When you come to a blank space, choose a word from the list to put in the blank or make up your own word.

rowboats	dinosaurs	chocolate	spaceships
tag	baseball	spaghetti	hide and seek
wolves	tigers	ice cream	canoes
treasure	berries	terrible	spinach
pirates	mermaids	gull eggs	ships
moose	music	wonderful	greenstones

Dear _____,

Hello from Isle Royale! I am having a _____ time living at the lighthouse. It is a little crowded! But my ten brothers and sisters and I have fun playing _____. Yesterday, we took _____ across the lake to another island and looked for _____. Our groceries have almost run out, and I miss eating _____. Please mail me some _____ with your next letter! Right now, out on Lake Superior, I can see _____ going by. I hope you will come and visit.

Your friend, _____

Fishy Findings

Isle Royale's reefs and deeps provide many homes for lake trout to live. Lake trout at Isle Royale are the same type, or *species*, but they can look different (just like us!). Researchers have identified four different forms of lake trout. One form lives on humps of reefs, another lives down deep. One is long and lean. One is a flashy dresser. Each form fits where and how it lives.

Imagine you are a researcher and have identified a new lake trout form. Make your research notes here:

Where does it live? _____

What does it eat? _____

Other observations: _____

Sketch your lake trout: _____

Name your lake trout form: _____



My name is *Humper*. I like to live just off the shore of Isle Royale near reefs.



My name is *Lean*. I like to live in shallow water (less than 70 meters deep).



My name is *Redfin*. I like to live in water that is not too deep, but not too shallow (average 80 meters).

My name is *Siscowet*. I like to live down deep in Lake Superior (over 100 meters).



Ranger Rank

Rangers work together as a team to protect Isle Royale. There are different types of rangers that help take care of the park. What type of ranger are you? Answer the questions below to find out!

1. If you were an animal at Isle Royale, you would be a –

- A. *Beaver.* You like to change the environment around your home.
- B. *Lake trout.* You are always on the move.
- C. *Moose.* You defend yourself and others.
- D. *Loon.* You enjoy expressing yourself.
- E. *Raven.* You have a curious mind.

Mostly A -

Maintenance rangers maintain trails and campgrounds, generate water and power, and keep buildings safe.



2. If you could do one activity at Isle Royale, you would like to –

- A. *Go on a backpacking trip.* You like to hit the trail and get your feet dirty.
- B. *Observe the night sky.* You like to see the big picture.
- C. *Jump in Lake Superior.* You like to take the plunge.
- D. *Attend a guided tour.* You like to learn about the park.
- E. *Scuba dive a shipwreck.* You like to dive beneath the surface and look at the details.

Mostly B -

Administration rangers keep park rangers organized and set goals for the park to accomplish.



3. If you wrote a book about Isle Royale, it would be called –

- A. *How to Build and Take Care of Trails and Campgrounds*
- B. *The History of Isle Royale National Park*
- C. *Protecting Island Resources: Why Leave No Trace Works for Isle Royale*
- D. *Isle Royale Plant and Wildlife Nature Guide*
- E. *Isle Royale: A Great Place for Research*

Mostly C -

Protection rangers respond to medical emergencies, perform search and rescues, and fight wildland fires.



4. If you were a tree at Isle Royale, you would be a –

- A. *Quaking aspen.* You like to grow as part of a team.
- B. *Balsam fir.* You like to be responsible for things.
- C. *Paper birch.* You like to take the lead.
- D. *Northern white cedar.* You like to help people.
- E. *White spruce.* You are comfortable exploring new places.

Mostly D -

Interpretation rangers help visitors plan trips to Isle Royale and give programs about park resources.



Mostly E -

Resource rangers travel all over Isle Royale to study plants, wildlife, and human history.



My Journal Notes

Record notes, drawings, and other observations from your adventure.

Keep Exploring, Junior Ranger!

- Learn more about Isle Royale National Park online at: www.nps.gov/isro
- Visit other Lake Superior national park sites, like Keweenaw, Grand Portage, Apostle Islands, and Pictured Rocks
- Discover the National Park Service site or public land closest to your home
- Become a Web Ranger at: www.nps.gov/webrangers

For more information about Isle Royale National Park, contact:



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ISLE ROYALE NATIONAL PARK

JUNIOR RANGER

This certificate of achievement
is presented to:

As a Junior Ranger,

I promise to preserve the beauty of the island.

I will protect the plants and animals that call the park home.

I will keep Isle Royale in my heart forever by sharing it with others.



Sealed on this date

Park Ranger signature

