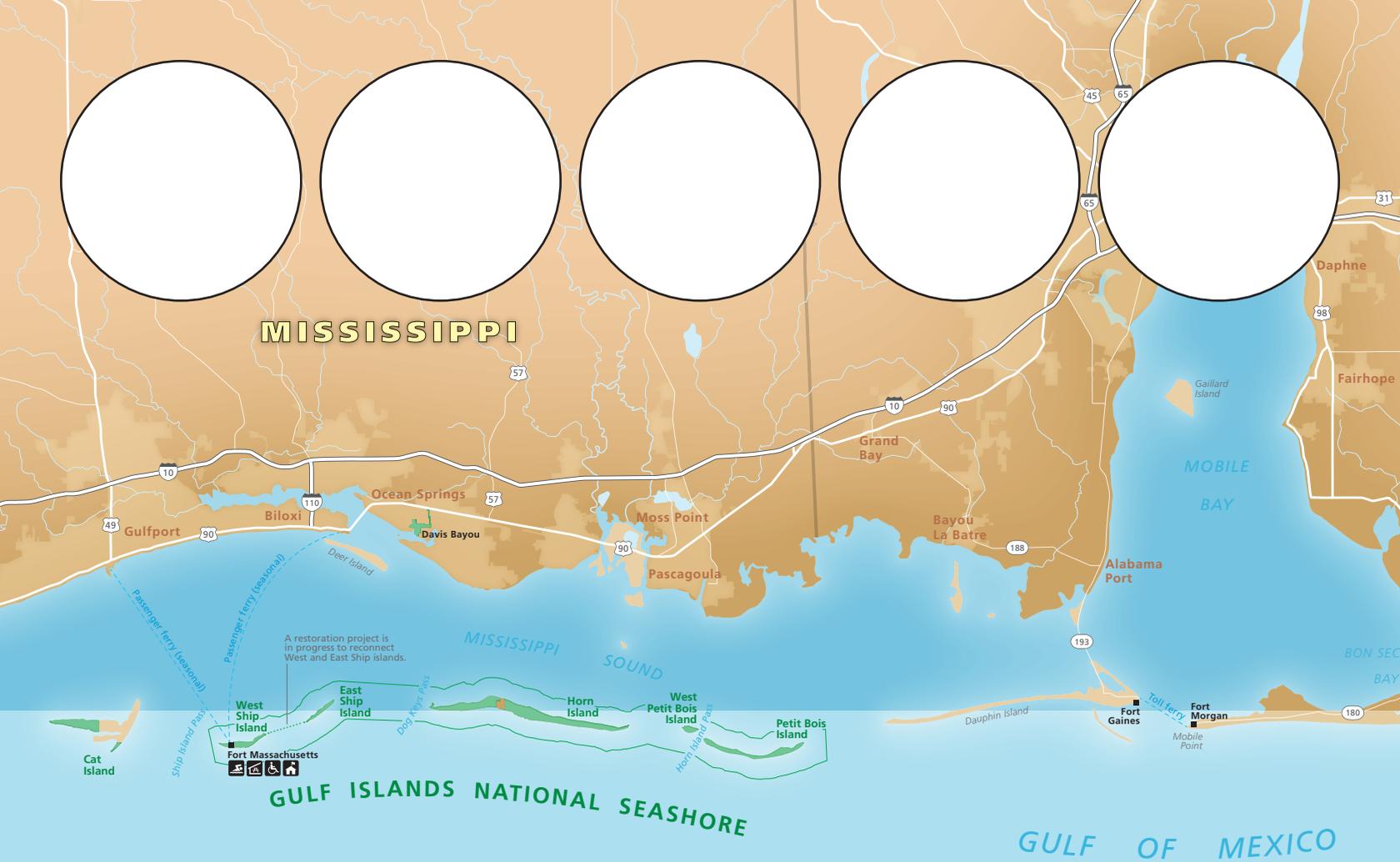




GULF ISLANDS JUNIOR RANGER ACTIVITY BOOK





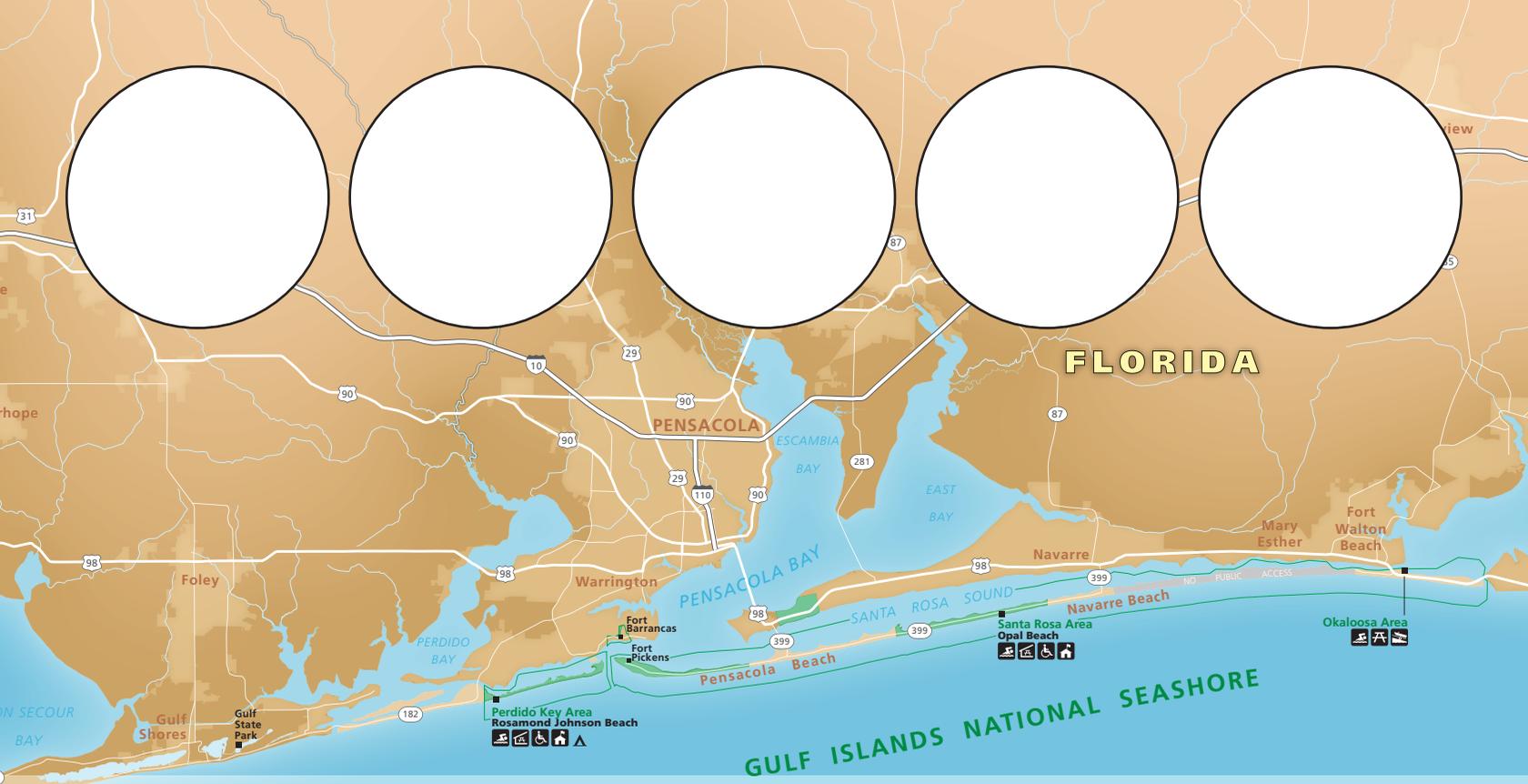
North

0 10 20 Kilometers
0 10 20 Miles

Trail/boardwalk	Gulf Islands National Seashore	Wheelchair-accessible	Picnic area
Multi-use trail	Urban area	Ranger station	Pavilion
Florida National Scenic Trail	Fortification	Boat launch	Campground
		Swimming area	Backcountry camping

How to become a GULF ISLANDS JUNIOR RANGER

Gulf Islands National Seashore is a unique place and Junior Rangers help protect it. As you explore the national seashore, remember to follow all park rules. These rules keep you safe and protect the park for you and the millions of others that visit the park. Before you start your visit, ask your parent to go to <https://www.nps.gov/guis/learn/management/lawsandpolicies.htm> and review the rules with you.



In order to earn your Gulf Islands Junior Ranger badge you'll need to collect seashells by completing the activities within this book. Each activity is worth a certain number of seashells. The number of seashells you'll need to collect is based on your age. In the space below write your age on the left, and add up the number of seashells you collected on the right.

Your Age:	Age	Seashells	Total
	6-9	6	Seashells Collected:
	10-12	10	
	13+	20	





The Gulf of Mexico is fed by waters flowing from rivers throughout the United States. Connected rivers and bodies of water are known as watersheds. The Mississippi Watershed covers nearly half of the continental United States.

Draw a star on the map below where you are from.

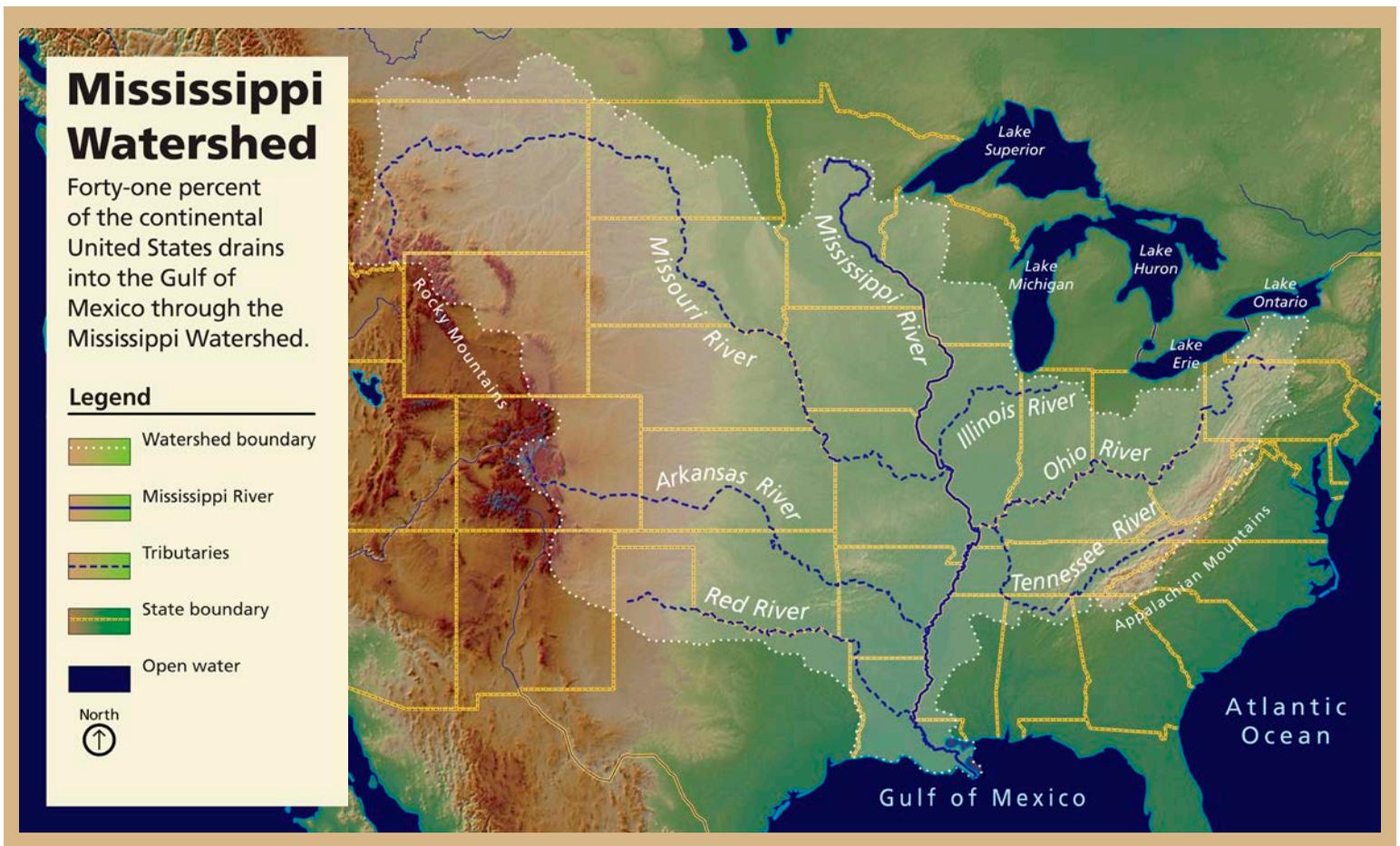
If your home is not on the map below, you can write it in here: _____

Is your home within the Mississippi Watershed? Yes No

The rivers in the Mississippi Watershed and other watersheds carry sediments downstream to the Gulf of Mexico. As these sediments build-up due to water currents in the gulf, they form the barrier islands, like those at Gulf Islands National Seashore.

How did you get to the Gulf of Mexico and the national seashore?

BONUS: Label as many states as you can on the map below.



Wilderness

When the barrier islands off the coast of Mississippi and Florida formed, they were wild places, free from human activity. Later, American Indians and eventually European colonists began using the islands. While some areas of the islands are developed, they are still wild places. Before visiting these places, you need to be prepared.

What items do you need in order to be prepared?

List the top 10 things you're taking with you on your adventure.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____



Ranger Tip-

Horn Island and Petit Bois Island off the Mississippi coast are official wilderness, a

special level of protection ensuring the islands will remain wild with your help!

Leave No Trace

Make sure your visit does not impact the wonders you see. Use the following seven principles of leave no trace.

1. Plan Ahead and Prepare
2. Travel and Camp on Durable Surfaces
3. Dispose of Waste Properly
4. Leave What You Find
5. Minimize Campfire Impacts
6. Respect Wildlife
7. Be Considerate of Other Visitors

Dispose of Waste Properly

There are garbage and recycling dumpsters throughout the national seashore. When a dumpster are not available, pack trash out of the park. Litter harms wildlife and pollutes the beautiful landscapes at the park. Left in the environment litter can take months and even years to break down.

Draw a line to match the amount of time you think each item takes to break down.



1 Month

2 Months

5 Years

20 Years

200 Years

1 Million Years



Ranger Tip- Glass containers are not allowed on park beaches.



Coastal Communities

Hint - The PARK MAP will help you find the answers!

Salt Marshes

Daily tides help spread microscopic organisms throughout the marsh creating a nutritious feast for young marine life. Fish, shrimp, oysters, and mussels feed on algae and marsh grass particles. The brackish mix of fresh and salt water shelters juvenile fish and crabs from predators.

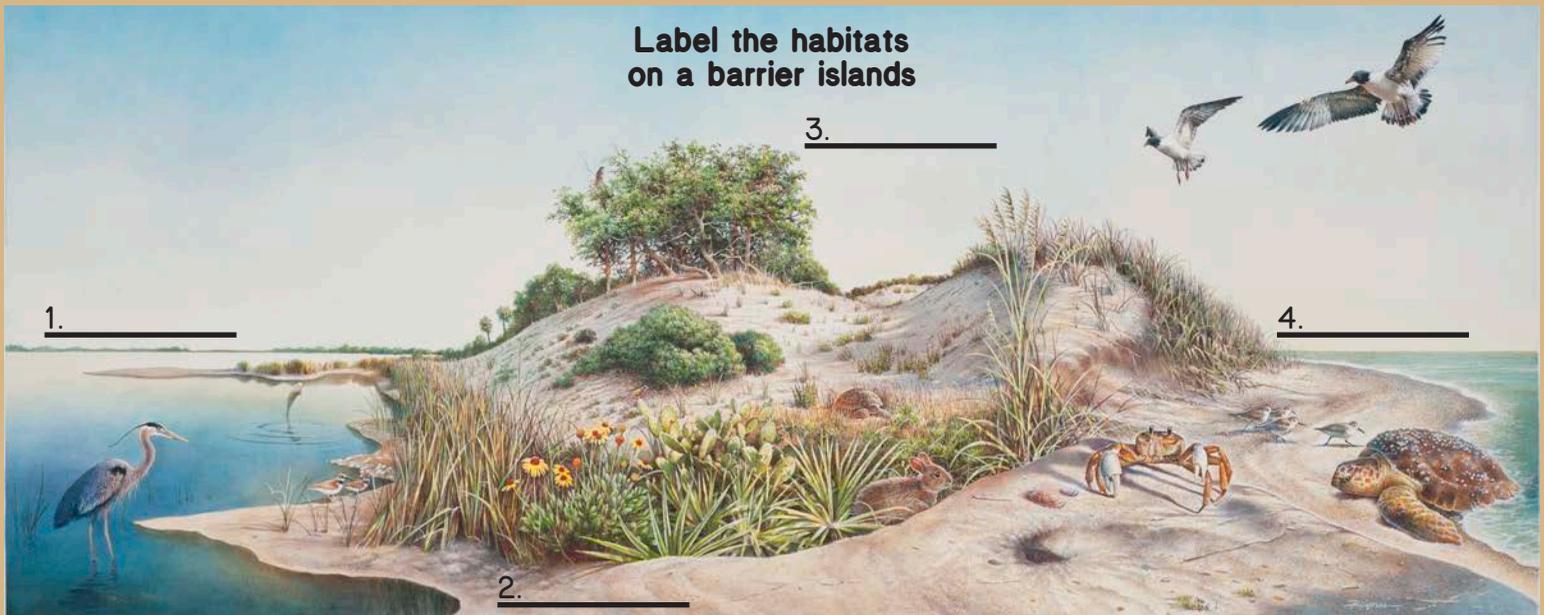
Within the salt marshes of Gulf Islands, an apex predator makes its nest by piling grasses and mud then laying about 30 eggs. Can you name this animal?

Sound

Between the gulf islands and the mainland are shallow bodies of water that shelter maturing shrimp and fish from open waters. Due to their location near developed areas, sounds can be affected by a myriad of human activities, including the degradation of the water quality and marine life caused by upstream pollution.

The seagrass beds in shallow waters provide habitat, food, and protection for juvenile animals. Can you name an animal that relies on seagrass beds?

Label the habitats on a barrier islands



Dunes

As you cross this barrier island, notice differences in elevation and how the vegetation and wildlife change. Between the gulf and sound, sea oats take root, helping to form and stabilize primary dunes. Shrubs and trees colonize old, secondary dunes. You may see beach mice, red-winged blackbirds, and butterflies.

Sea oats anchor the dunes to the islands and benefit from a tiny mammal that moves seeds around the islands as it feeds on them. Can you name this animal?

Maritime Forests

Oaks, magnolias, and hickory trees can withstand strong winds and salt spray to produce dense maritime forests on islands and the mainland. This mixed woodland serves both as a wildlife habitat and as a storm buffer. Think of this area as a woodland pantry full of food that attracts a variety of mammals.

The trees and shrubs that grow in maritime forests provide excellent habitat for many animals. Can you name some of the animals that live in these forests?

Sensing the Islands

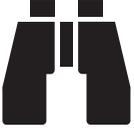
Gulf Islands National Seashore stretches 160 miles from Mississippi to Florida. In the park there is much to delight the senses, but there is more than meets the eye. To experience the natural wonders of the national seashore in a different way, find a quiet spot where you can sit or lie down comfortably. Close your eyes and remain completely still. Notice everything you hear, feel, and smell. Use your senses to find the hidden treasures of the seashore. Write or draw some of the treasures you discover in the spaces below. **What did you hear, smell, or feel?**

A large circle is divided into three equal sections by three lines meeting at the center. The sections are labeled with the words 'Hear', 'Smell', and 'Feel' in a light blue, sans-serif font. 'Hear' is positioned on the left side of the circle, 'Smell' is on the right side, and 'Feel' is at the bottom. The interior of the circle is blank, intended for students to write or draw their sensory observations.



Gulf Islands BINGO!

As you explore the park, try to get BINGO! by completing the activities below; four boxes in a row, either vertically, horizontally, or diagonally.

<p>Find a sea oat. Draw it below.</p>	<p>Sit in a quite place.</p>  <p>What can you hear?</p>	<p>Find a body of water. Describe the scene below.</p>	<p>Hike a park trail.</p>  <p>Which trail did you hike?</p>
<p>Salute a flag over a fort.</p>  <p>Which fort did you visit?</p>	<p>Look for lichen. Circle the colors you find.</p> <p>red gray green blue yellow orange</p>	<p>Attend a ranger program.</p>  <p>Ranger Signature -</p>	<p>Draw animal scat.</p> <p>Can you identify it?</p>
<p>Find animal tracks and sketch them below.</p>	<p>Spot a soaring bird.</p>  <p>Can you identify it?</p>	<p>Sketch a wildflower.</p>	<p>Pick up litter.</p>  <p>What did you find?</p>
<p>Have a picnic.</p>  <p>Remember to keep wildlife wild by not sharing food.</p>	<p>Draw a seashell you find on the beach.</p>	<p>Wave to an alligator.</p>  <p>Be sure to stay back.</p>	<p>Sketch a tree leaf. Can you identify it?</p>

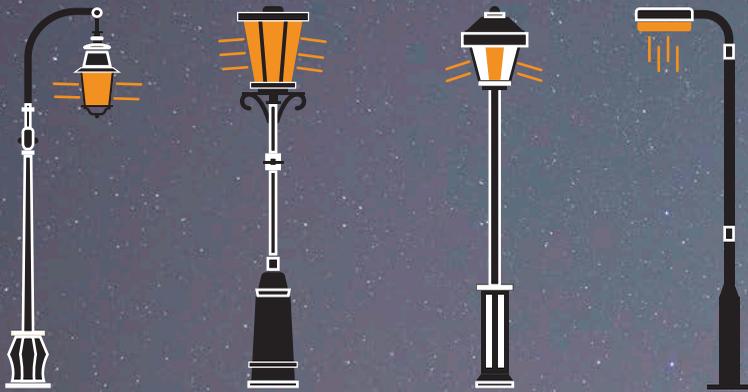


Ranger Tip-Park symbols help visitors enjoy national parks safely. As you explore the national seashore keep an eye out for these symbols to enhance your visit.



Dark Night Skies

Where should the light go? Humans have adapted to do most of our activities during the day. When we do things at night, we need light, but light is a tool we must use responsibly. Outdoor lamps are often too bright and point up into the sky. They add to light pollution, and when light pollution is really bad, we cannot see the stars and nocturnal animals may be harmed.



Draw an **X** over wasteful street lights.

Circle the street light that protects night skies.

Do you see any street lights in the national seashore?

Yes

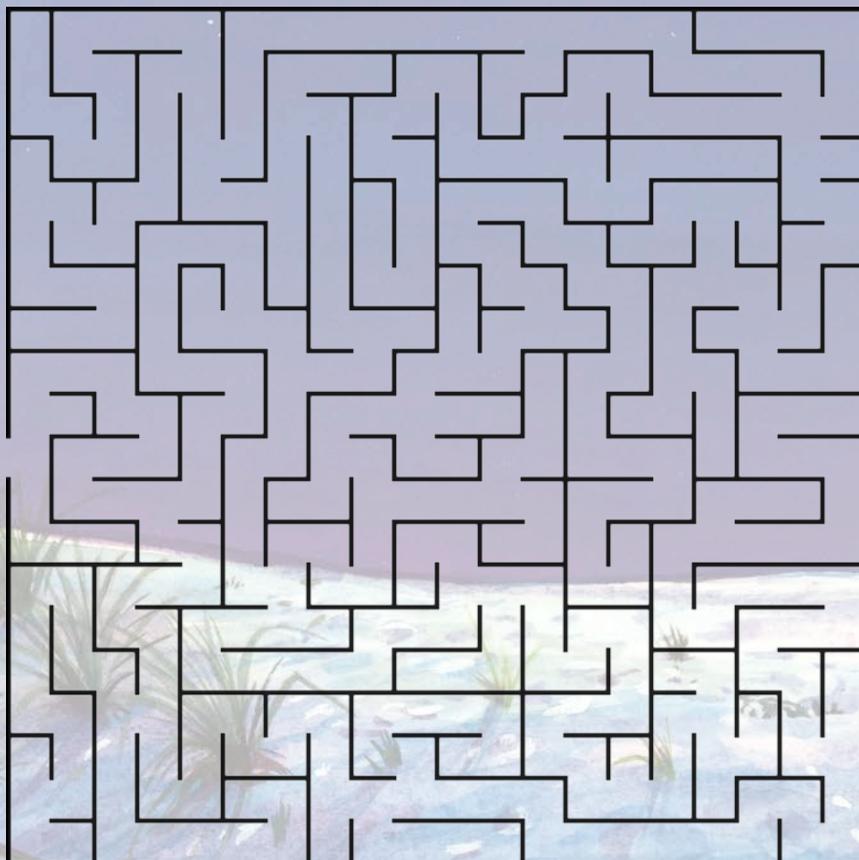
No

Ranger Tip-Dark night skies benefit animals and humans.



Getting to the Gulf

Baby sea turtles rely on the moon and its reflection off the water to get safely to the Gulf of Mexico. Artificial lights can distract or confuse these hatchlings. **Can you help the sea turtles get to the gulf safely?**

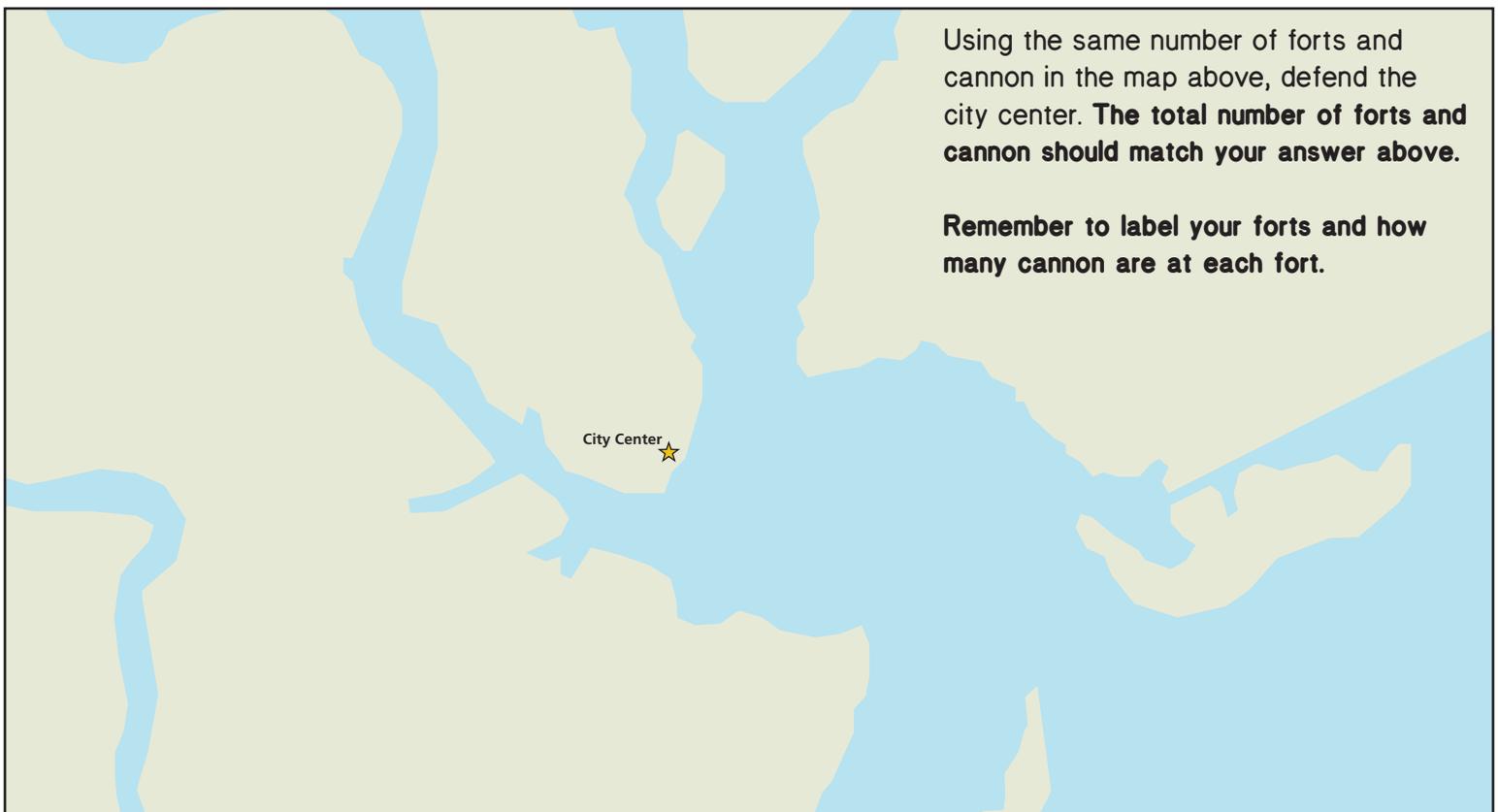




Protecting the Coast

Americans built harbor forts during the American Revolution (First System) and another series between 1789 and 1812 (Second System). Forts Pickens, McRee, Barrancas, and Advanced Redoubt were part of the Third System of coastal fortifications built between 1816 and 1870. Third system forts were built out of stone or bricks, featured levels of cannon, and were sometimes organized in groups to provide crossfire near narrow waterways.

Advanced Redoubt



Working Together

Just like the forts surrounding a harbor entrance had to work together, the soldiers in had to work together to fire the cannon. These groups were known as detachments, led by a sergeant. Each member of the detachment had specific responsibilities. Cannoneers 1 and 2 worked together to sponge the cannon and ram the cartridge and cannonball down the barrel. Cannoneer 3 used a firing lanyard to fire the cannon, Cannoneer 4 passed the cartridge and cannonball forward to Cannoneer 2 to be loaded. The final member of the detachment was known as the Gunner. The Gunner used tools like the elevating mechanism to aim the cannon.

Form Your Detachment

You've been assigned the role of sergeant. Who are you going to pick to join your detachment? Think about family and friends who would be best suited based on the job descriptions above.

Cannoneer 1 _____

Cannoneer 2 _____

Cannoneer 3 _____

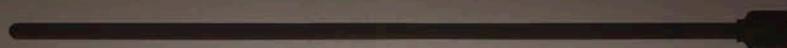
Cannoneer 4 _____

Gunner _____



Ranger Tip- All of the cannon at the national seashore are over 100 years old. You can help protect them and yourself by not climbing on the cannon or their supports.

In Third System forts, like Fort Massachusetts on Ship Island, some cannon crews were protected in gun chambers known as casemates. These arched ceiling rooms were designed to transfer the massive weight of the brick and cannon above to the vertical piers and to withstand the shock waves from cannon when fired. Between firings the crew could close the embrasure—the opening in the wall—with iron shutters to protect themselves from enemy fire.



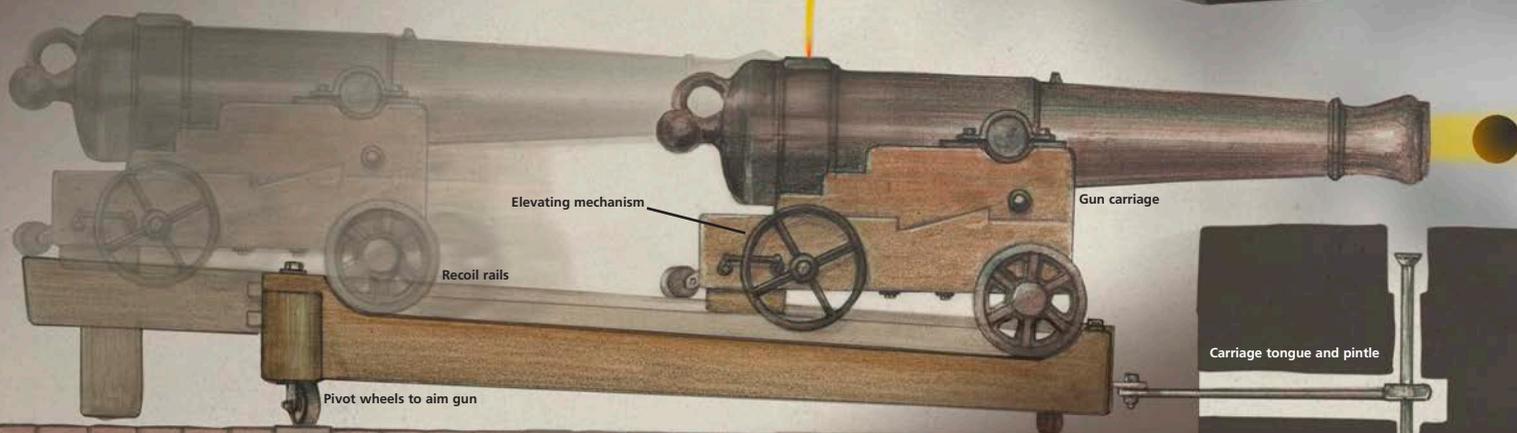
Rammer—used to push powder cartridge and ball from muzzle to breech



Worm—used after sponge to remove remains of cartridge bag



Sponge—used to clean and extinguish burning embers between shots





Lighthouses and Life-saving

barrier islands have served as places of refuge from the wild, open waters of the Gulf of Mexico. On Santa Rosa Island, the United States built a Life-saving Station in the late 1800s to provide rescue services to ships in distress. On Ship Island, lighthouses represented safety and home for generations. For nearly 100 years this lighthouse signaled the safety of Mississippi Sound.

Find the words listed below in the Ship Island Lighthouse.

LIGHTHOUSE

COAST GUARD

LIFESAVING

RESCUE

BOAT

HARBOR

LAMP

LYLE GUN

ISLAND

SAFETY



Beach Safety Jumble

The beach is a fun and exciting place, but open water can be a dangerous place as well. In just a few minutes a wonderful day at the beach can turn into a disaster. Stay alert for sudden storms and marine life that could sting or bite. In emergencies, dial 911.

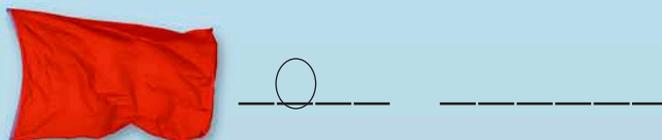
Decode the swim beach warning flags.

After you've decoded the flags use the circled letters to identify the common name for dangerous open water currents.

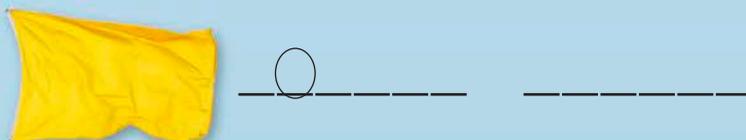
rewta
dscloe
ot het
iupclb



hhgi aazrdh



emimdu zrhdaa



wlo draazh



gdnareous
einmra flei



Ranger Tip-Beach flags are only posted at park swim beaches when lifeguards are on duty.



These currents commonly form after storms. If you are caught in these currents, stay calm. Do not try to swim against the current. Swim right or left to escape the flow.

What Type of Ranger?

There are many career paths to choose from in the National Park Service. Gulf Islands park rangers include scientists who monitor wildlife and their habitat, law enforcement rangers who protect the park and visitors, interpretive rangers who tell the stories of the park and help visitors understand its importance, maintenance rangers who keep everything clean and working smoothly, and many other types of rangers. Take the quiz below to find out what type of ranger you might want to be!

When visiting the park, what would you most like to do?

- A. Tour the visitor center exhibit to learn about park history, culture, and wildlife.
- B. Explore the forest with a scientist and learn how animals survive on barrier islands.
- C. Help build a new section of trail.
- D. Hike along the beach and look for litter and illegal campsites.

Which present would you be most excited to receive on your birthday?

- A. Camera
- B. Microscope
- C. Tool set
- D. GPS Unit

Given a choice of the following special classes, which would you choose?

- A. Storytelling
- B. Wildlife Tracks or Chemistry
- C. Model airplane design and construction
- D. First Aid/CPR

Which topic would you be most likely to read a book or watch a movie about?

- A. Adventures, and Exploration
- B. Animals, History, or Architecture
- C. Engineering and Mechanics
- D. Solving Mysteries



Mostly A's

You're a park interpreter!
You share information about Gulf Islands with park visitors.



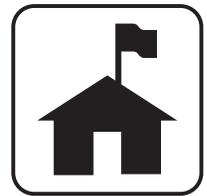
Mostly B's

You're a park scientist!
You study wildlife, plants, or historic artifacts and structures of Gulf Islands.



Mostly C's

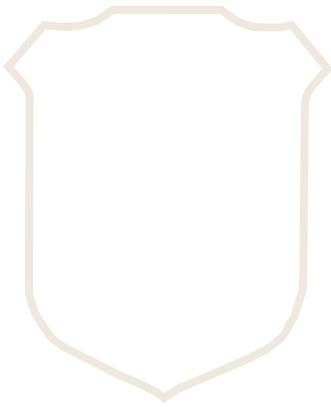
You're a park mechanic!
You help keep the park facilities clean and operating smoothly.



Mostly D's

You're a law enforcement ranger!
You protect the park and keep visitors and resources safe.

Did you get a mixture of letters? Then you might be a Park Manager with a variety of interests!



Gulf Islands Junior Ranger

has completed all of the required activities to be certified as an official Gulf Islands Junior Ranger!

NATIONAL PARK SERVICE

Letter to the Superintendent

National parks are led by Superintendents responsible for the preservation and protection of the park. Take an opportunity to write the Superintendent a postcard about your experience at the national seashore.

Place
Stamp
Here

Superintendent
Gulf Islands National Seashore
1801 Gulf Breeze Parkway
Gulf Breeze, FL 32563

