



Sandy Hook Junior Ranger Adventure Book



HOLLY FOREST



Coastal
Defense



"THE
HOOK"

Endangered
Species



JUNE 11, 1764

FORT HANCOCK ARMY POST 1895-1974



SANDY HOOK UNIT
GATEWAY NATIONAL RECREATION AREA
NATIONAL PARK SERVICE
U.S. DEPARTMENT OF THE INTERIOR



THIS BOOK BELONGS TO:

JUNIOR RANGER ID CARD

Now that you are officially a Sandy Hook Junior Ranger, you need a Junior Ranger identification card! So write your name, put your own picture on the front and sign the back! Now you have this to remind you of everything you did to become a Sandy Hook Junior Ranger!!

Congratulations!



JUNIOR RANGER

Gateway NRA, Sandy Hook Unit



PLACE YOUR
PHOTO HERE!



NAME: _____

I AM PROUD TO BE A SANDY HOOK JUNIOR RANGER. I PROMISE TO EXPLORE, LEARN AND PROTECT THE TREASURED RESOURCES OF SANDY HOOK. I WILL HELP OTHERS TO SAFELY ENJOY SANDY HOOK'S BEAUTY, NATURE, AND HISTORY BOTH NOW AND IN THE FUTURE.

SIGNATURE



JUNIOR RANGER

Gateway NRA, Sandy Hook Unit



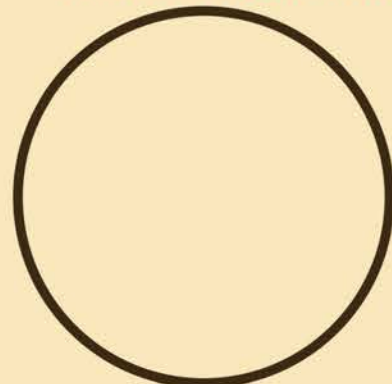
IS AN OFFICIAL

SANDY HOOK JUNIOR RANGER



PARK RANGER NAME

PARK RANGER SIGNATURE



PLACE CANCELLATION STAMP
IN THE ABOVE CIRCLE!

I, _____, AM PROUD TO BE A SANDY HOOK JUNIOR RANGER. I PROMISE TO EXPLORE, LEARN AND PROTECT THE TREASURED RESOURCES OF SANDY HOOK. I WILL HELP OTHERS TO SAFELY ENJOY SANDY HOOK'S BEAUTY, NATURE, AND HISTORY BOTH NOW AND IN THE FUTURE.

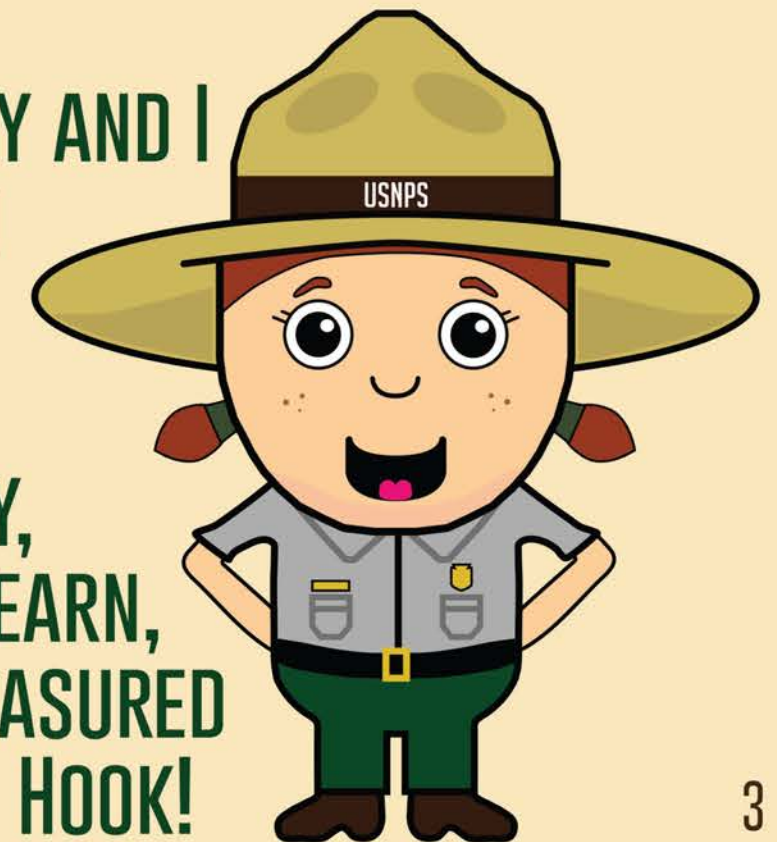
WELCOME TO SANDY HOOK!

FOLLOW THESE STEPS TO COMPLETE YOUR JUNIOR RANGER BOOK!

1. Complete the following activities: National Park Service Arrowhead, What Do Rangers Do?, and Draw Yourself As A Ranger.
2. Complete 5 other activities if you are 6 or under. Complete 8 other activities if you are 7 - 12. Complete all other activities if you are 13 or older.
3. Attend a Sandy Hook Lighthouse tour if you are 48 inches or taller and talk with a ranger or volunteer. Write down 3 things you learned about the lighthouse below.

1. _____
2. _____
3. _____

HI! MY NAME IS DAISY AND I AM GOING TO HELP YOU ON YOUR QUEST FOR YOUR JUNIOR RANGER BADGE! ALONG THE WAY, YOU WILL EXPLORE, LEARN, AND PROTECT THE TREASURED RESOURCES OF SANDY HOOK!



NATIONAL PARK SERVICE ARROWHEAD

In the United States, there are over 417 national park sites. That includes national parks, seashores, recreation areas, historical parks, lakeshores, monuments, preserves, battlefields, and memorials. You can see these sites in every state, Washington, D.C., the U.S. Virgin Islands, Guam, Puerto Rico, and American Samoa.

How do you know if the park you are in is a national park? Look for the arrowhead!! It is on our signs, uniforms, and brochures! It symbolizes everything we love about our national parks.

*Fill in the blanks and learn what each piece of the arrowhead represents:

The _____ represents our beautiful scenery.

The _____ represents the wildlife that lives in our national parks.

The _____ represents the plants that grow in our national parks.

The _____ represents the history and culture the National Park Service protects.



NAUTICAL FLAG MYSTERY MESSAGE

Use the nautical flag code key to the left to solve the mystery message about Sandy Hook! Write the correct letter beneath the flag on the brown line.





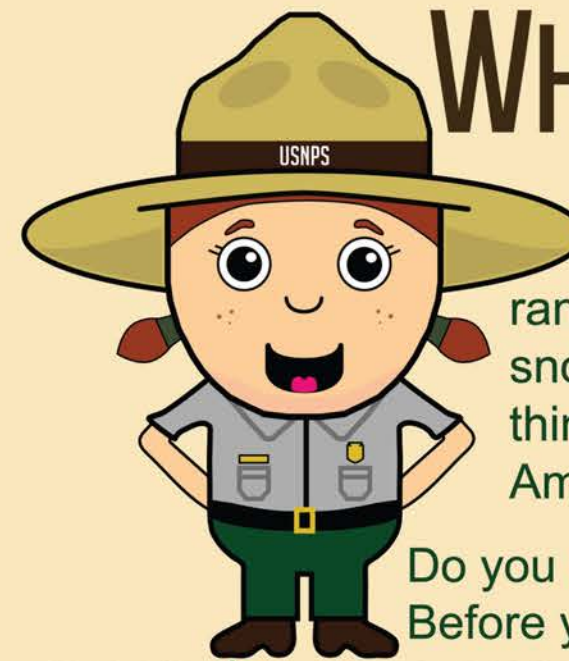






NAUTICAL FLAG CODE KEY

| | | | | | |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
| A | B | C | D | E | F |
|  |  |  |  |  |  |
| G | H | I | J | K | L |
|  |  |  |  |  |  |
| M | N | O | P | Q | R |
|  |  |  |  |  |  |
| S | T | U | V | W | X |
|  |  | | | | |
| Y | Z | | | | |



WHAT DO RANGERS DO?

Do you ever wonder what park rangers do? Well, let me tell you being a park ranger isn't easy! They have to deal with rain, snow, heat, and lots of people. But can you think of anything better than working in America's National Parks? I don't think so!

Do you have what it takes to be a park ranger? Before you answer, take some time to learn what rangers do on an average day. Circle the correct word in each sentence below.

Rangers help **PRESERVE** | **DESTROY** | **DECORATE** America's National Parks.

Rangers **EAT** | **REMOVE** | **CARE FOR** historic artifacts.

Rangers lead **DANCES** | **PROGRAMS** | **SONGS** to educate visitors.

Rangers protect animals & people by **FORGETTING** | **ENFORCING** | **WHISPERING** laws.

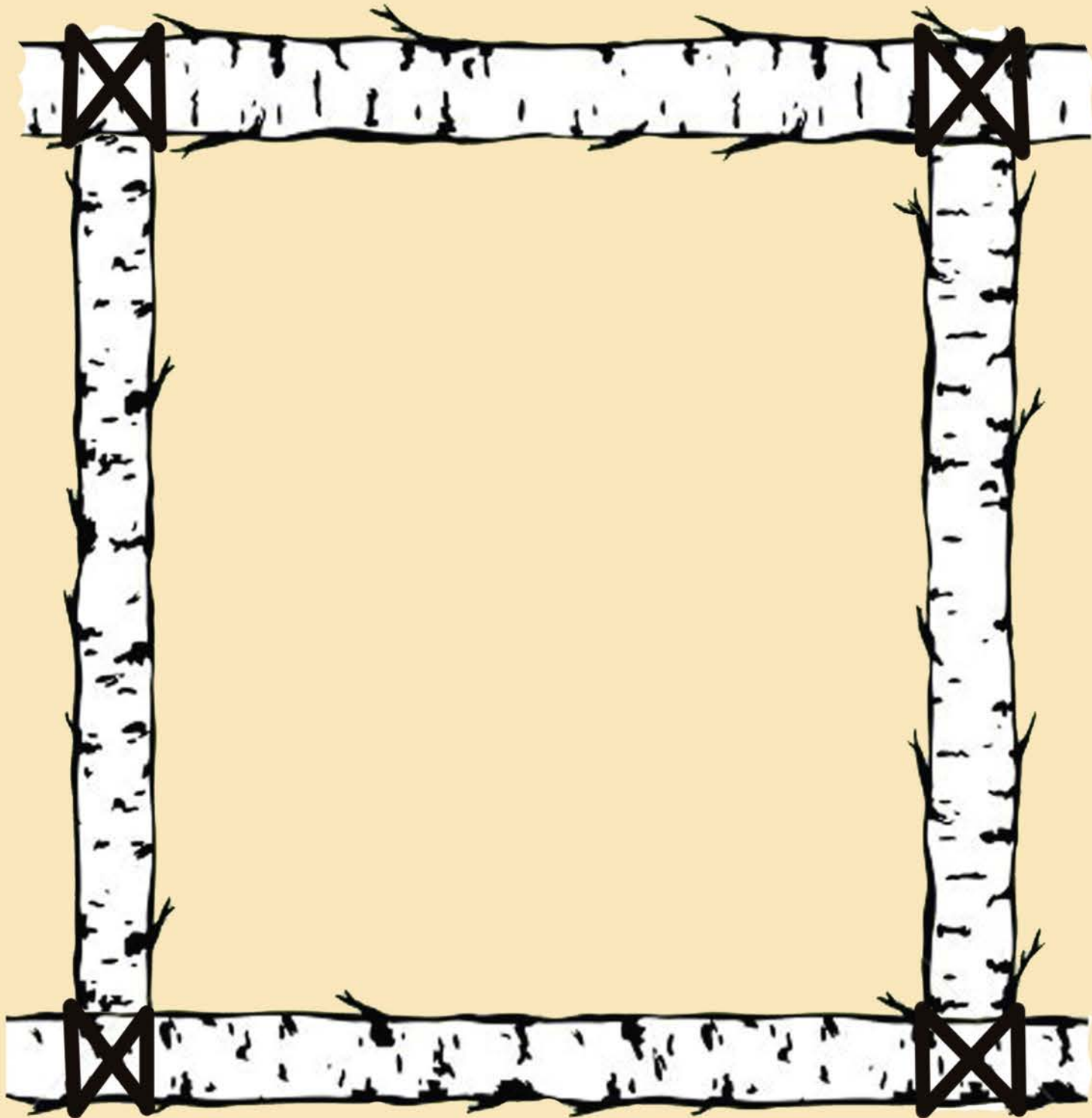
Junior Rangers can do their part by **OBSERVING** | **BREAKING** | **TAKING** the historical and natural objects they find throughout the park.

A "flat hat" is a great tool to protect a park ranger from **WAVES** | **THE SUN** | **ALIENS**.

Do you think you would be a good park ranger? Why?

DRAW YOURSELF AS A RANGER!

Now that you have learned about the National Park Service and what park rangers do, it is time to imagine yourself as a park ranger! Draw yourself and don't forget the ranger hat and badge!



MAKE YOUR OWN LIGHTHOUSE

Lighthouses are very unique and amazing. Each one has a different day mark and light pattern. A day mark is the way the lighthouse is painted so that ships know where they are. The light pattern refers to the color and blink pattern, if any, of the lens at the top. Here at Sandy Hook, our day mark is the all white tower and the red lantern house. Our light pattern is called a fixed white light which means it is a plain white light that does not blink. Now that you have learned about lighthouses, use the space below to draw your own lighthouse. Give it a fun daymark and explain your light pattern in the boxes on the bottom of the page.

Lens Order: _____

Color of Light: _____

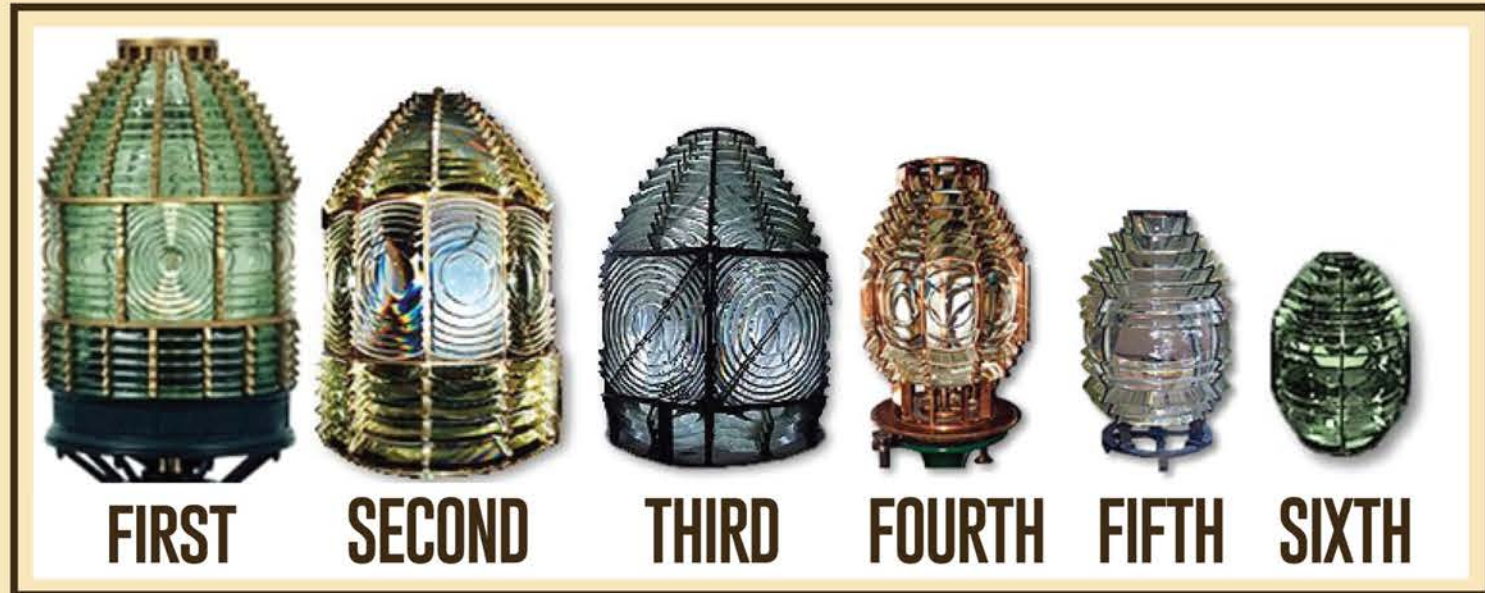
Number of Blinks: _____

LIGHTHOUSES

The Sandy Hook Lighthouse is the oldest operating lighthouse in the country! It was first lit on June 11, 1764. This lighthouse was originally 500 ft from the water's edge, but now it is over 1.5 miles away due to the longshore current. The current moves sand north along Sandy Hook, which causes Sandy Hook's beaches to grow. Go on a ranger or volunteer led tour of the lighthouse and enjoy the view!



The Sandy Hook Lighthouse has a Third-Order Fresnel Lens. The Fresnel Lens was created by Augustin-Jean Fresnel (Fray-nel) in 1822. This lighthouse had its lens installed in 1857. The Third-Order Fresnel Lens is one of six different lens sizes. The First-Order is the largest size and the Sixth-Order is the smallest size. In the photo below, you can see all six orders of Fresnel Lenses. Now, complete the activity on the next page to show what you have learned!



TAKE A WALK ON THE BEACH

Sandy Hook receives many visitors throughout the year who come to sunbathe, bird watch, swim and hunt for beautiful shells! Take a walk on the beach and answer the questions below.

1. LISTEN TO THE BIRDS. WHAT DO YOU THINK THEIR CALL OR SONG MEANS?

2. WALK ALONG THE WATER'S EDGE. DIP YOUR TOES OR FINGERS INTO THE WATER. HOW DO YOU FEEL?

3. FIND SOME SHELLS AND EXAMINE THEM. WHAT DO YOU THINK ONCE LIVED INSIDE?

4. LOOK FOR TRACKS IN THE SAND NOT MADE BY HUMANS. WHAT DO YOU THINK WAS THERE BEFORE YOU?

5. RUN YOUR FINGERS THROUGH THE SAND AND MAKE A SANDCASTLE. DRAW A PICTURE OF IT BELOW.

BIRDS IN FLIGHT



Here at Sandy Hook, we have many different species of birds. The Hook's maritime forest and salt marshes are ideal habitats for shorebirds. These three birds are frequent summer time visitors at Sandy Hook. Can you identify them by the way they look and the description of their behavior? Remember to always stay hydrated and wear proper clothing when birding!

GREAT AMERICAN EGRET

COMMON TERN

OSPREY



This large raptor can be seen nesting on tall poles and the roofs of buildings. It catches and carries fish in its talons to feed itself. Its wingspan can be more than 71 inches across! What is it? _____



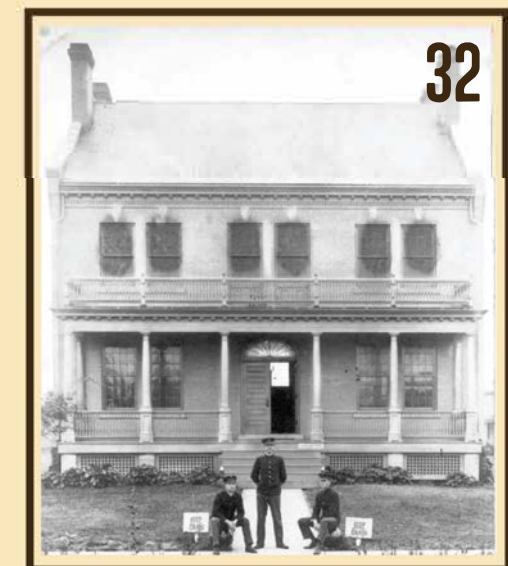
This large wading bird gracefully flies overhead with its 57 inch wingspan. When it is not flying, it stretches out its long neck to make it easier to hunt small animals in the water. This bird nests high in trees in groups called colonies. What is it? _____



This bird species loves Sandy Hook! You can see them swooping and flying all over the bayside beaches. Their wingspan can be up to 15 inches in length. They are great hunters and can dive 20 feet down to catch the fish. What is it? _____

FORT HANCOCK IN THE PAST

Pick up a "Fort Hancock Walking Tour" brochure in the Visitor Center. Use the matching numbers in the brochure to find these buildings and discover what life was like at Fort Hancock! When you find the building, write down the name of it on the line by the photo.



POLLUTION IN OUR OCEANS AND BAYS

Go sit on an oceanside beach and look out at the water. What do you see? It is a skyline with tall towers and skyscrapers that make up New York City. Now while there are many wonderful things that come with living so close to a large city, there are also some bad things. Millions of people live in the NY-NJ metropolitan area and that comes with garbage and lots of pollution.

Here at Sandy Hook we follow the "Leave No Trace" ethic. That means you must leave every place as you found it. Put your trash into a dumpster or bring it home with you. Many people do not follow this rule and just leave their trash behind. This trash goes into the water and surrounding areas and hurts the local wildlife. So make sure to tell everyone you know to clean up after themselves and not leave anything behind. Then the park will be clean for the wildlife and future visitors!

Look at the photo below. There are lots of examples of local wildlife and pollution. Circle all of the examples of pollution to show that it should not be there!



THE PIPING PLOVER

The Piping Plover is a special bird here at Sandy Hook! It is an endangered species that nests on both the ocean and bay sides of Sandy Hook. An endangered species is an animal or plant that is at risk of becoming extinct (gone forever). Unscramble the brown words to learn more about the Piping Plover.



The Piping Plover is a very small **DNAS**_____colored bird that nests at the beach! This bird doesn't create its **ETSN**_____from twigs or leaves. Instead it only consists of **WAHSLLO**_____scrapes in the sand. Sometimes it is lined with tiny **LSLEHS**_____or pebbles. The Piping Plover can lay up to **ROFU**_____eggs in its nest. It will then take 26-27 days for the eggs to **CTHAH**_____. Their young are then responsible for **DEDFENGI**_____themselves. After an additional 21-25 days, they are able to **LFY**_____. Throughout the Piping Plover's life, it will feed on small **RIAMNE**_____invertebrates. While many Piping Plovers do nest at **NDAYS KHOO**_____, they love to fly **TOSUH**_____for the winter months.



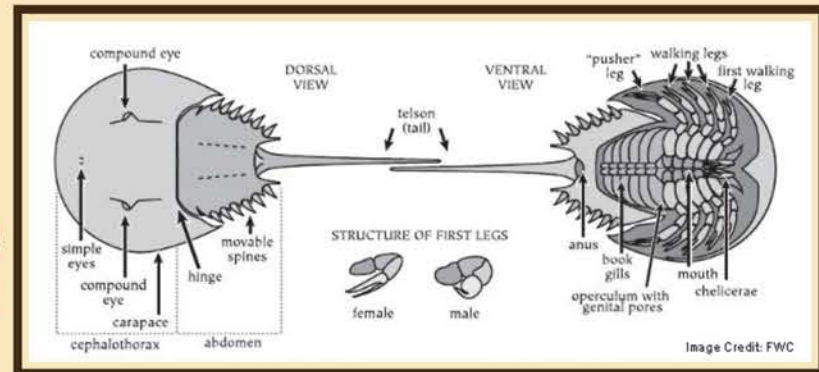
THE HORSESHOE CRAB

The horseshoe crab is a unique marine creature. It has been on this earth for millions of years. It was even alive even when the dinosaurs roamed the earth! This is why Horseshoe Crabs are often called living fossils. Something many people don't realize is that they are actually not crabs, but are more closely related to spiders.



Have you ever walked down the beach and found a horseshoe crab on its back? Sometimes the rush of waves flips the horseshoe crab upside down and forces it onto shore. If you see this it is okay to pick them up and turn them over. Ask an adult for help. Use two hands to pick up the horseshoe crab from **both sides** of its shell. **Never** hold it from the telson (tail) because you could hurt the horseshoe crab.

Many times the horseshoe crabs you see on the beach are not a dark brown color, but light beige like the horseshoe crab shown in the photo above. These are actually called molts. When a horseshoe crab grows, it gets too big for its shell. So it slides out of its old shell with a new, freshly grown shell. Horseshoe crabs will molt 16-17 times before they are fully grown. Horseshoe crabs on average live for 20 years



HORSESHOE CRAB ACTIVITY

Now that you have learned all about Horseshoe Crabs, why don't you try to draw one? Start at dot number 1 and follow all the way through to dot number 40. At the end you will have your own Horseshoe Crab!

