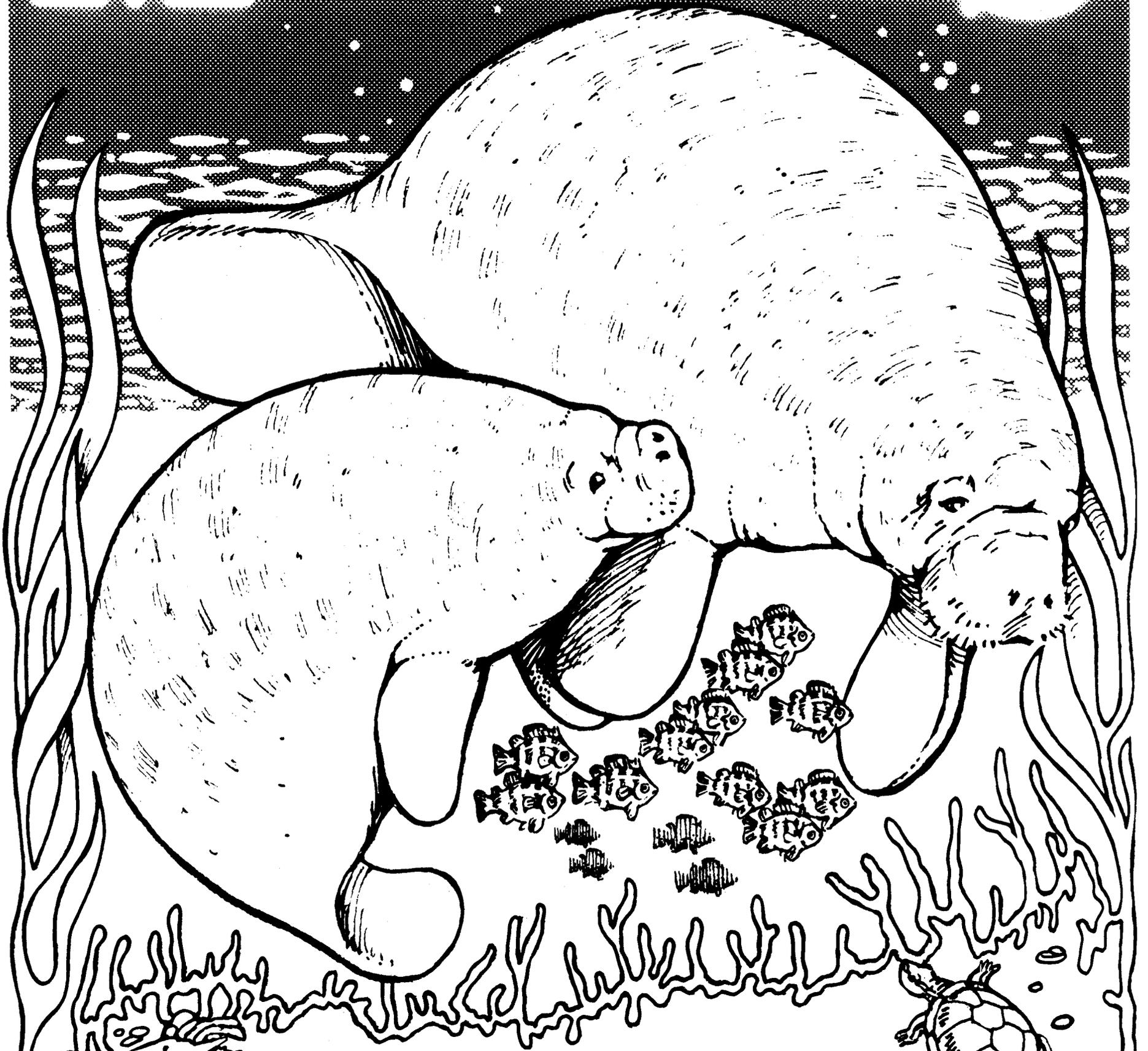


MANATEES



Florida's Gentle Giants

Illustrated by Jerry Bulgin

Name: _____

Date: _____

The Florida Manatee - Work Sheet

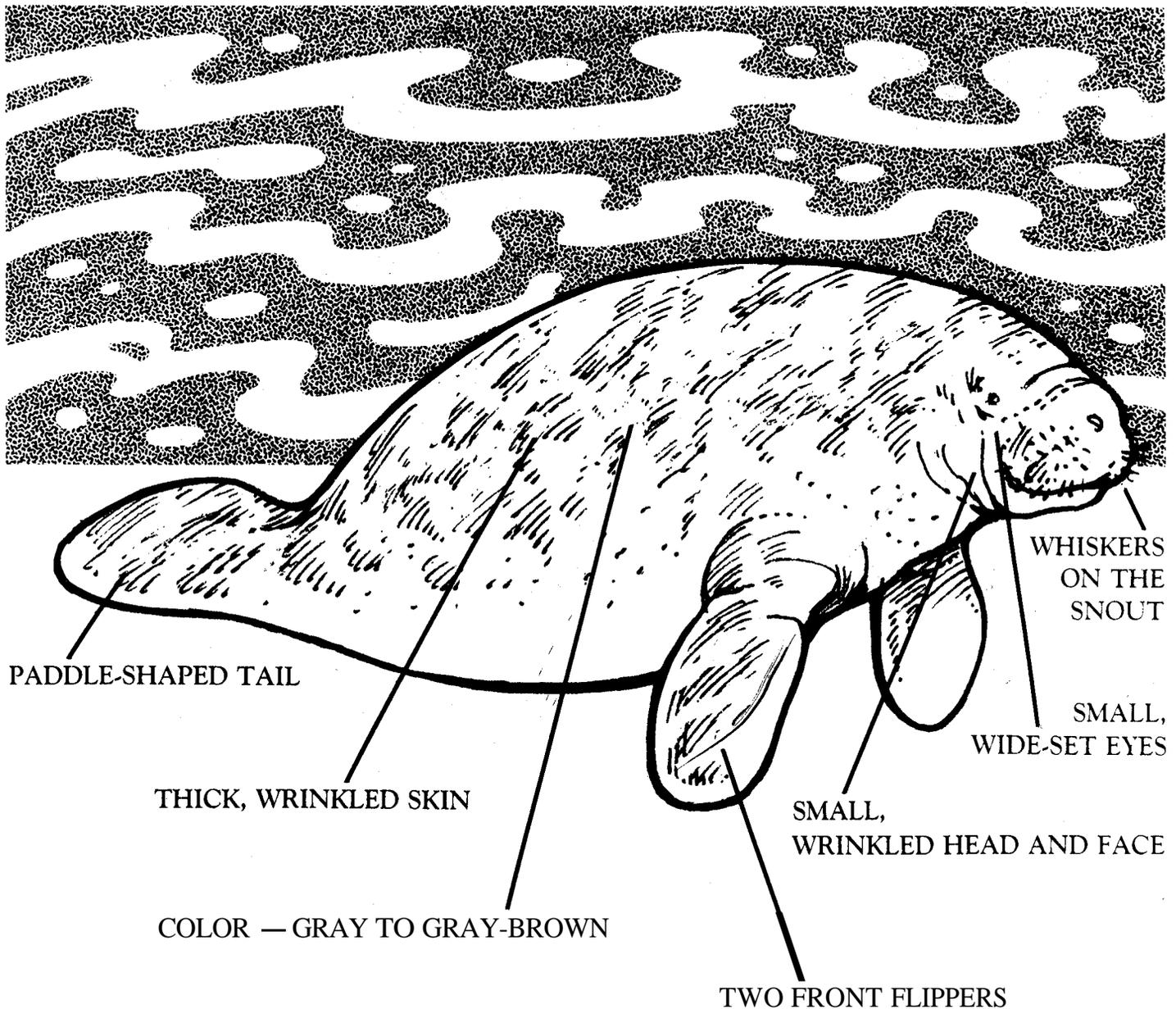
Before you start your session about manatees, take a few minutes to write down what you know about these animals. At the end of the session, write down what you learned and see how your two lists compare.

What I know about manatees now:	What I learned about manatees:

1. Based on what you learned about manatees, write a short story about the manatees that may live in the waterways near you. Include area landmarks, waterways and marinas in your story. How can these areas better protect manatees?
2. What are some things that you can do today to protect the manatee's habitat?

Remember, you can make a difference.

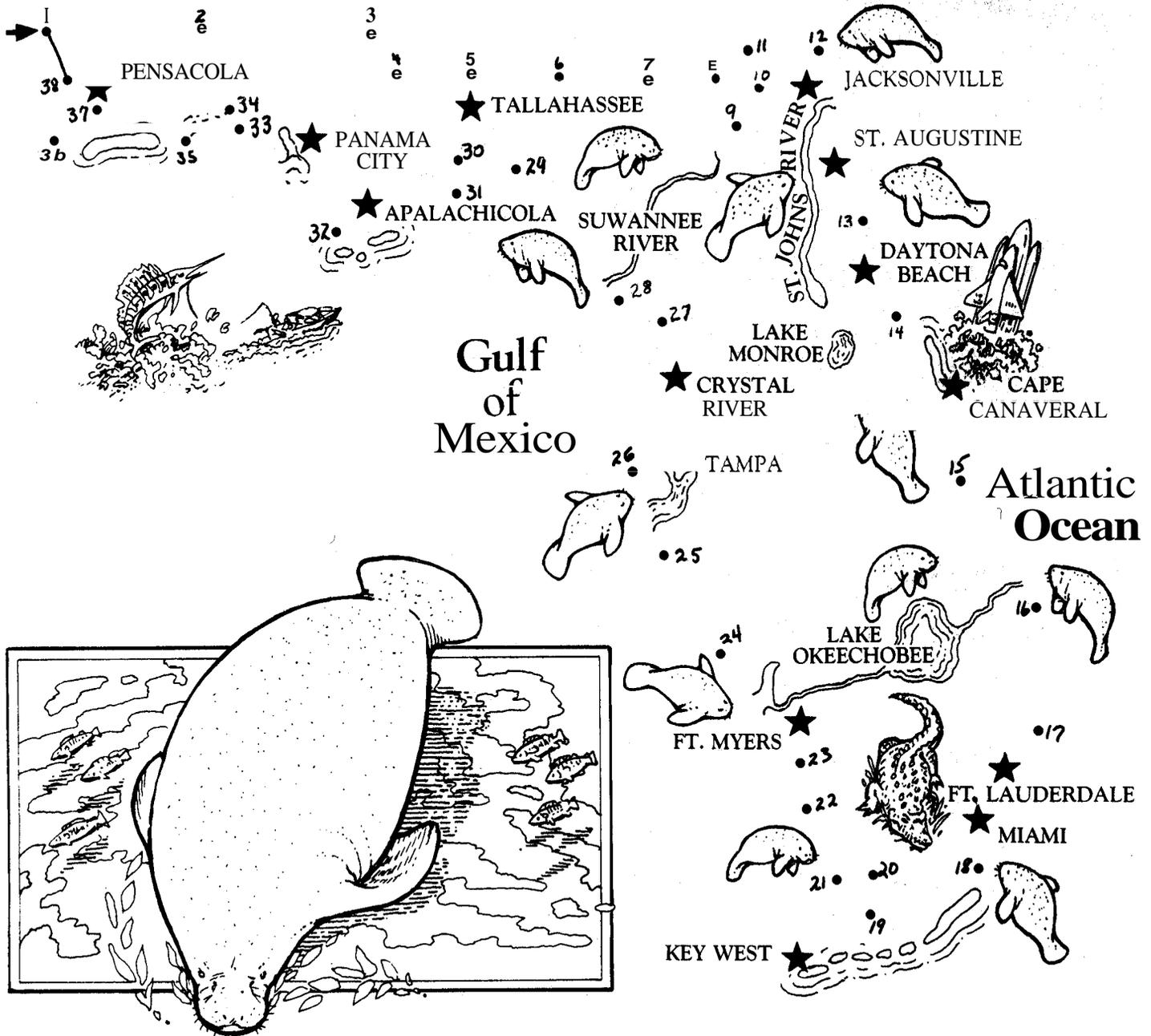
What does a manatee look like?



Manatees can grow up to **13** feet long and weigh 3,500 pounds. The average size is 10 feet and 1,000 pounds. Females are usually larger than males. Newborn calves are about **3** feet long and weigh 60 to 70 pounds.

Manatee calves nurse from teats at the base of their mother's flippers and will start nibbling on plants a few weeks after birth. Manatee mothers only have a short time to teach their calves how to find aquatic vegetation and where the warm water sites are found. Calves are dependant on their mothers for up to two years before they go off on their own. If a calf is separated from its mother too early, its chance of survival is not good.

Connect the dots to see where Manatees live!



All manatees can live in slow-moving rivers, saltwater bays and canals and the ocean. They are found in:

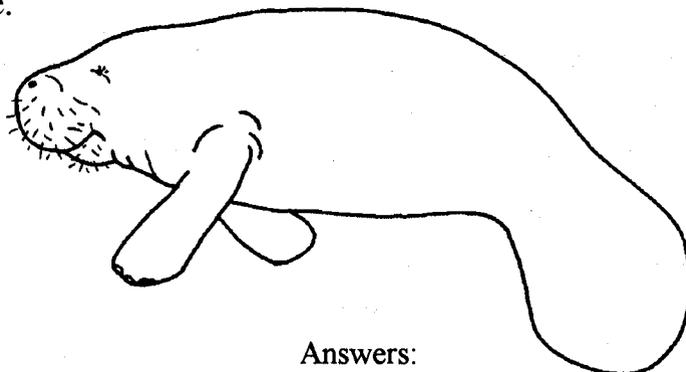
- ...Florida's coastal waters from Miami to Jacksonville.
- ...the St. Johns River from Jacksonville to Lake Monroe.
- ...the Gulf of Mexico from Florida Bay to the Panhandle rivers of North Florida.
- ...the Florida Keys.
- ...sometimes in the summer as far west as Texas and as far north as Rhode Island.

What are the four basic elements of HABITAT?

(Fill in the blanks to find out the basic elements of habitat)

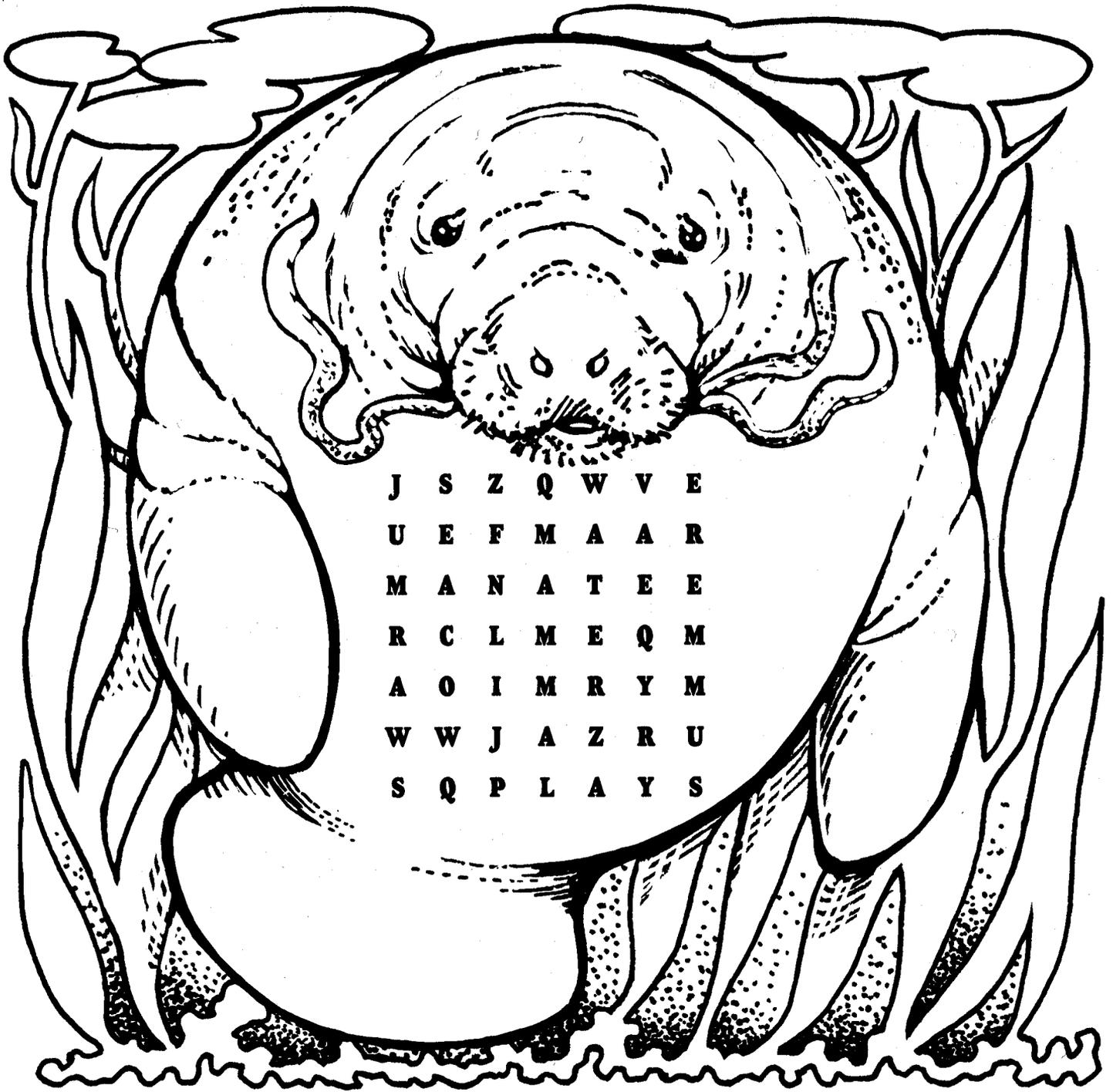
1. Manatees eat plants that grow in the water. These plants are called aquatic vegetation. Aquatic vegetation is the only type of F___O___ that manatees should eat.
2. Manatees seek out and **drink** fresh W_____ E ___ fi-om natural sources. They do not need people to provide this *drink* for them.
3. Manatees are migratory animals. Their travel is influenced by seasonal changes. Travel corridors are necessary for the manatee to move back and forth between summer and winter habitats. People who use these corridors must respect the manatees' need for safe passage and provide adequate SP ___ C ___ for the manatee to reach its destination.
4. Manatees must have a safe, protected area, or S H ___ L _____ R, that they can go to that keeps them away fi-om harassment, boat traffic, strong currents and people. These areas are needed for feeding, resting, playing, mating or calving their young. In Florida, with the growing number of people and boats, **this** safe protected area is getting harder and harder for the manatee to find.

If any of the four elements (_____, _____, _____, or _____) are missing, the manatee cannot survive. It is up to all of us to help the manatee survive.



Answers:

The four elements of suitable habitat are food, water, space, and shelter.



Now, find these words hidden in the Manatee.

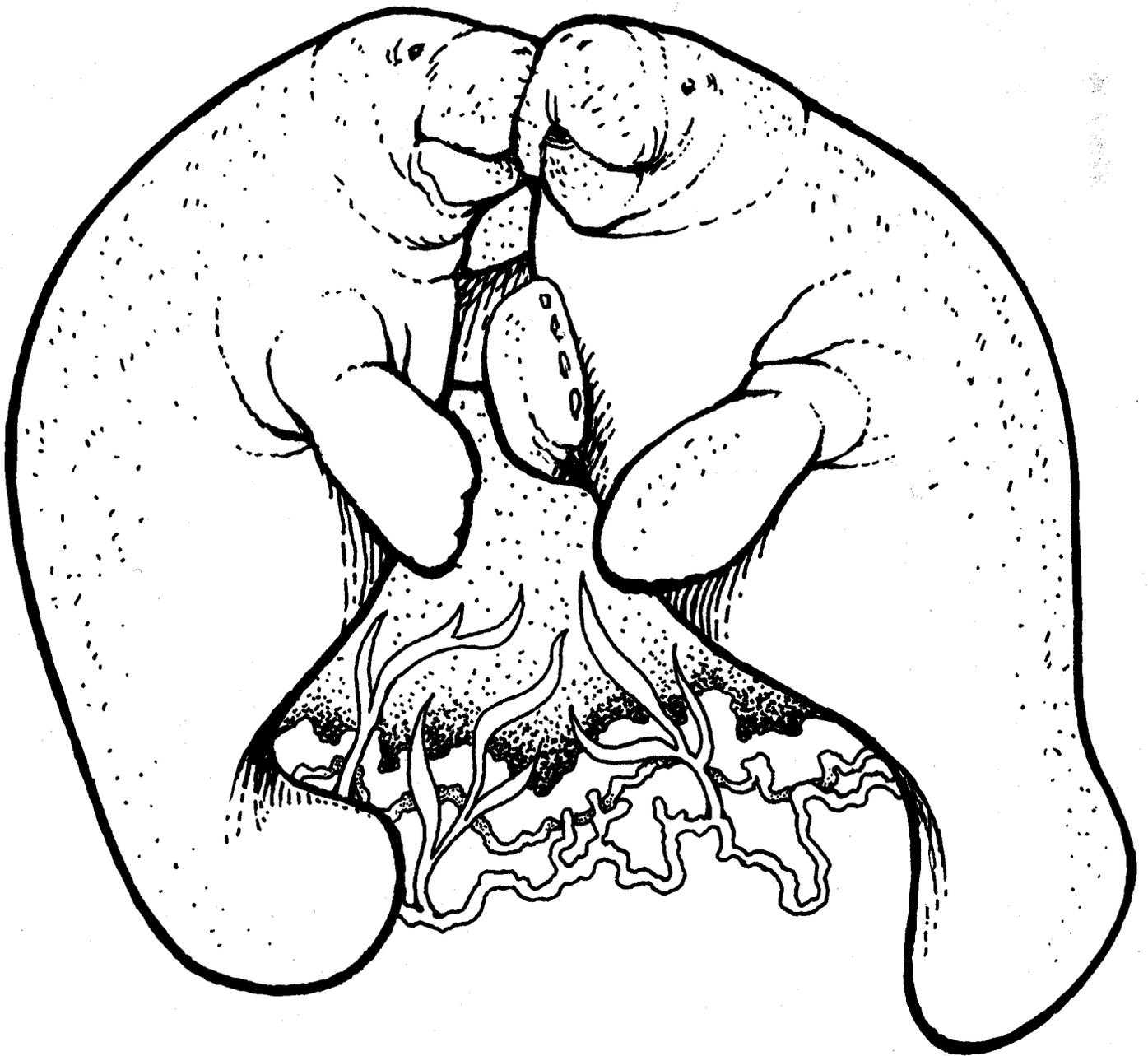
Words can read frontward, backward, up, down, and diagonally. Answers on back
 EAT MAMMAL MANATEE PLAY SEACOW SUMMER SWIM WARM WATER

What do Manatees eat in one day?

Manatees eat up to 100 pounds of water plants like Manatee grass, Turtle grass, Widgeon grass, Shoal grass, Water hyacinth, Water lettuce, Coontail, Tapegrass, or Eelgrass a day.

How long do Manatees live?

No one knows. One has lived over 40 years in captivity!



Trivia...

A manatee's heart beats at a rate of 50 to 60 times per minute.

A manatee's teeth are constantly being replaced as the worn down teeth fall out. There are at least 2,500 manatees in Florida.

Manatees do not have eyelashes.

Manatees sometimes groan when they stretch.

A manatee chews two times per second.

A manatee cannot turn its head sideways, so it must turn its whole body around.

Manatees are related to the elephant.

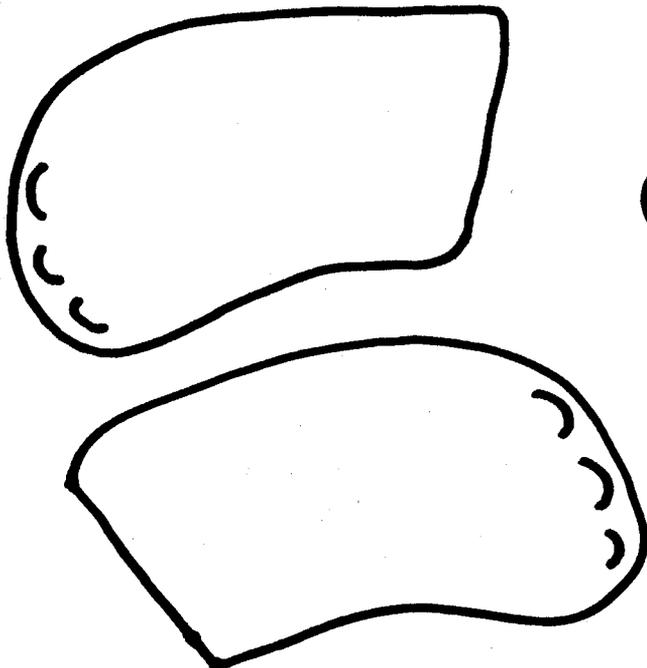
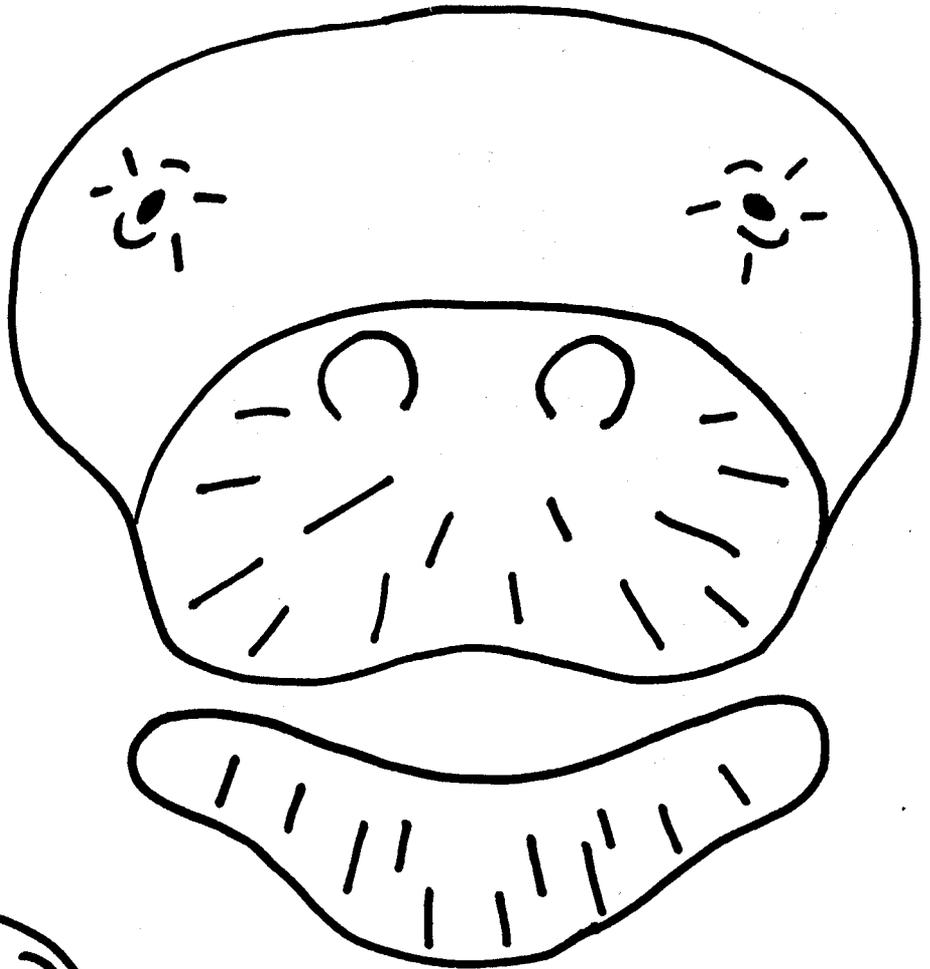
The bones in a manatee's flipper are similar to a human hand.

Manatees have three to four "finger" nails at the end of each flipper.

Manatee Puppet

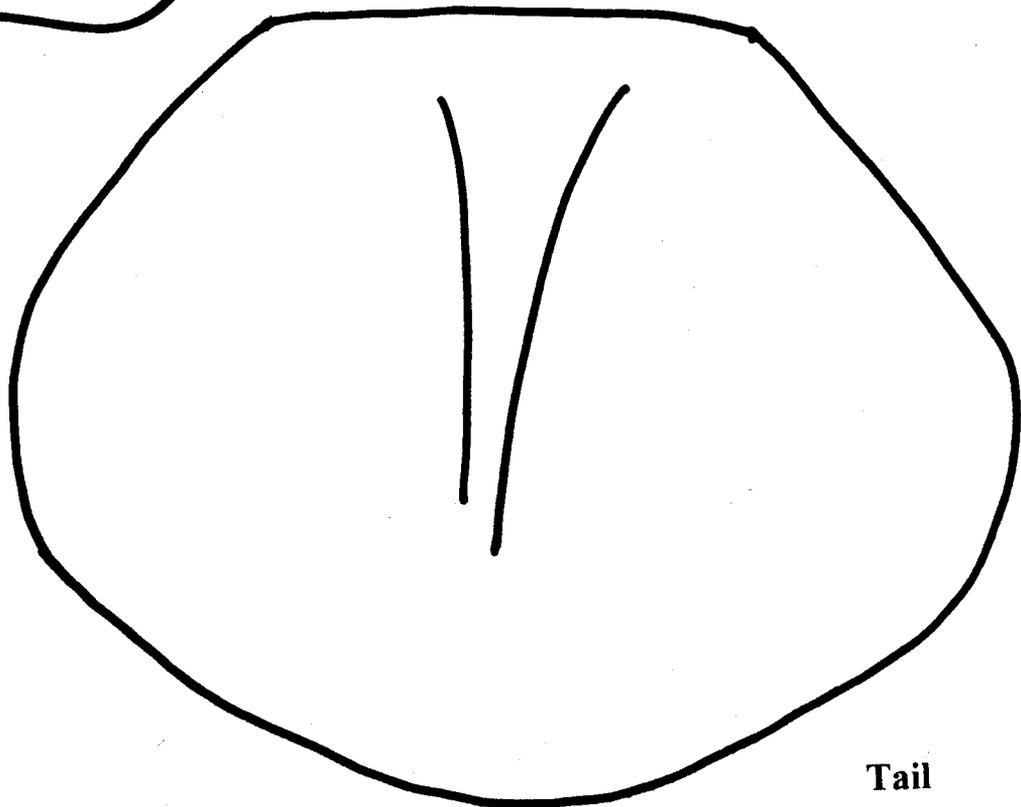
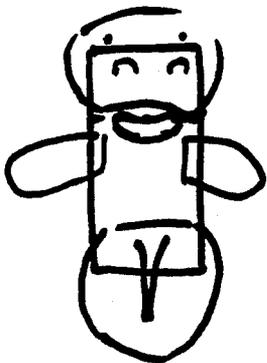
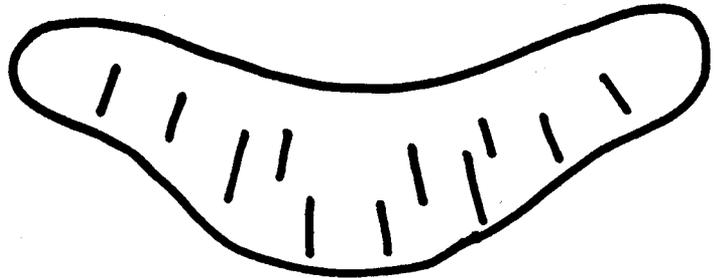
Directions: Color each of the pieces gray or brown. Cut the pieces out and glue them to a paper bag as shown below. Make sure you attach the head to the bottom of the bag so that you can open the manatee's mouth. Give your manatee a name and herd together with your other manatee friends. Manatees are great socializers!

(Puppet idea courtesy of the DEP Florida Marine Research Institute.)



Bottom of mouth

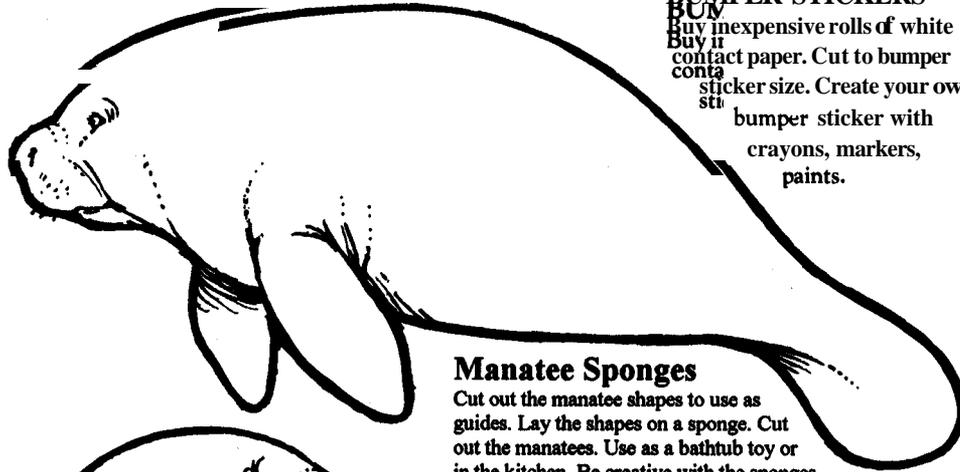
(glue just under the flap of the paper bag)



Tail

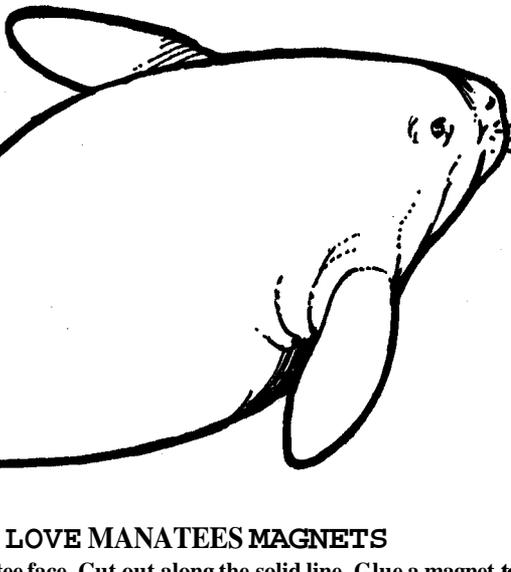
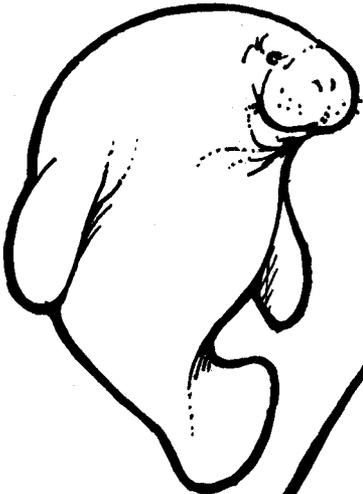
Tree Ornaments

Cut out the manatee shapes to use as guides. Lay the shapes on the construction paper and draw a line around each shape. Cut out the manatees. Tape an ornament hanger to the manatee shapes and hang on your tree. Shapes can also be used for mobiles.



Manatee Sponges

Cut out the manatee shapes to use as guides. Lay the shapes on a sponge. Cut out the manatees. Use as a bathtub toy or in the kitchen. Be creative with the sponges and use them for sponge painting your own wrapping paper or for decorating your T-shirts. (Make sure you ask an adult to help choose the right paint for your project.)



I LOVE MANATEES MAGNETS

Color Manatee face. Cut out along the solid line. Glue a magnet to the back. Use on the refrigerator for notes.

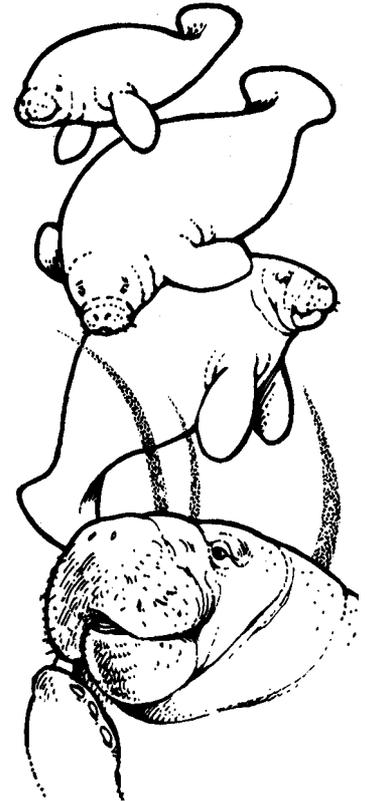


BUMPER STICKERS

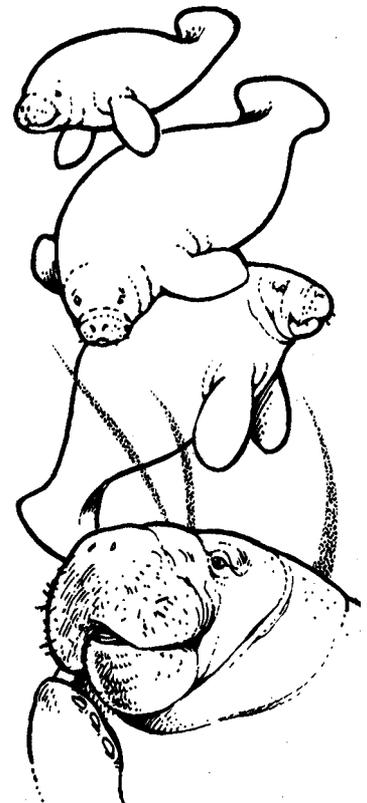
Buy inexpensive rolls of white contact paper. Cut to bumper sticker size. Create your own bumper sticker with crayons, markers, paints.

BOOKMARKS — Color and cut out the bookmarks on this page. To make the bookmarks stronger, glue each to a piece of construction paper that is the same size as the bookmarks. Give one to a friend!

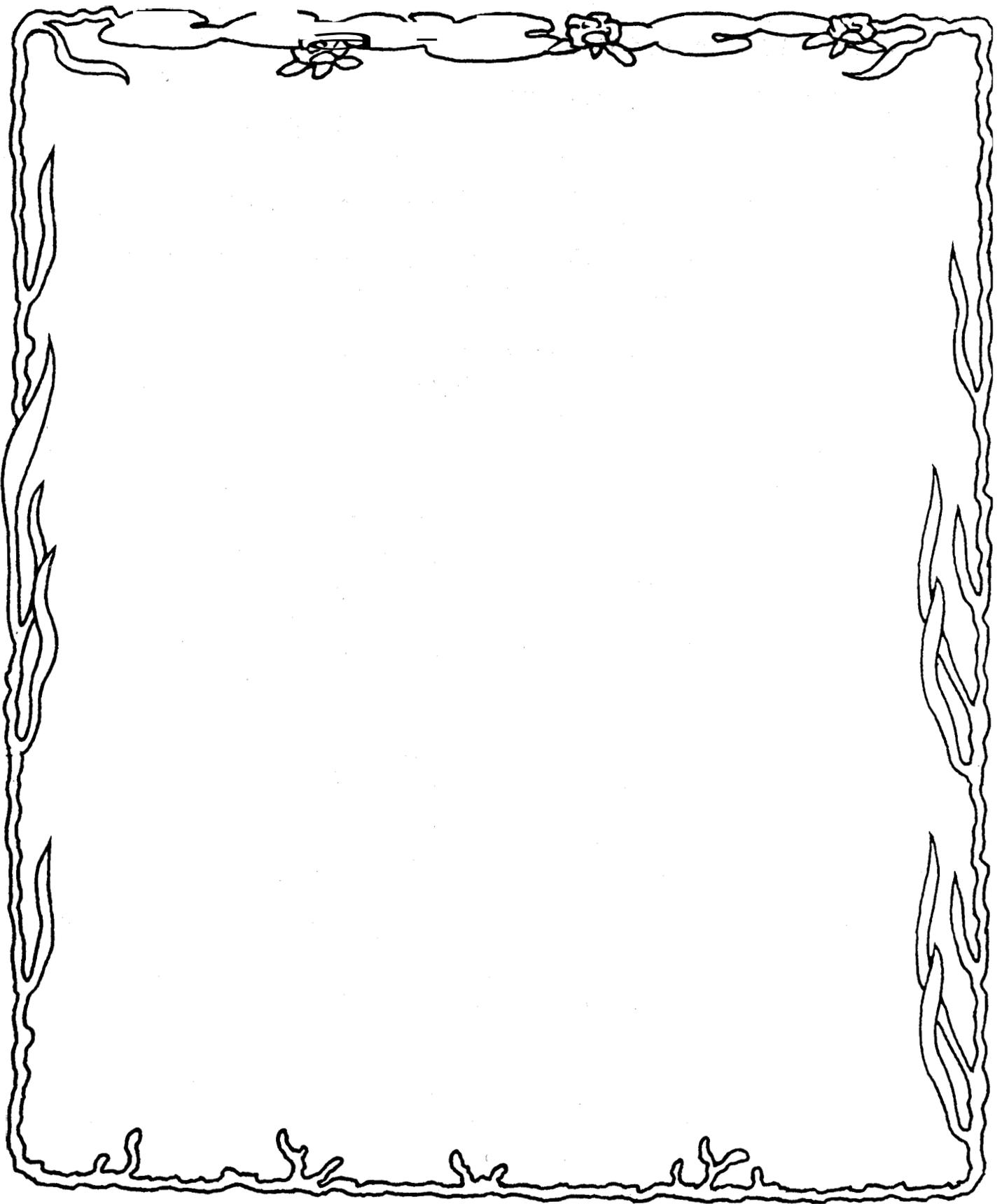
I LOVE THE MANATEES



I LOVE THE MANATEES



MANATEE DRAWING ACTIVITY



TT

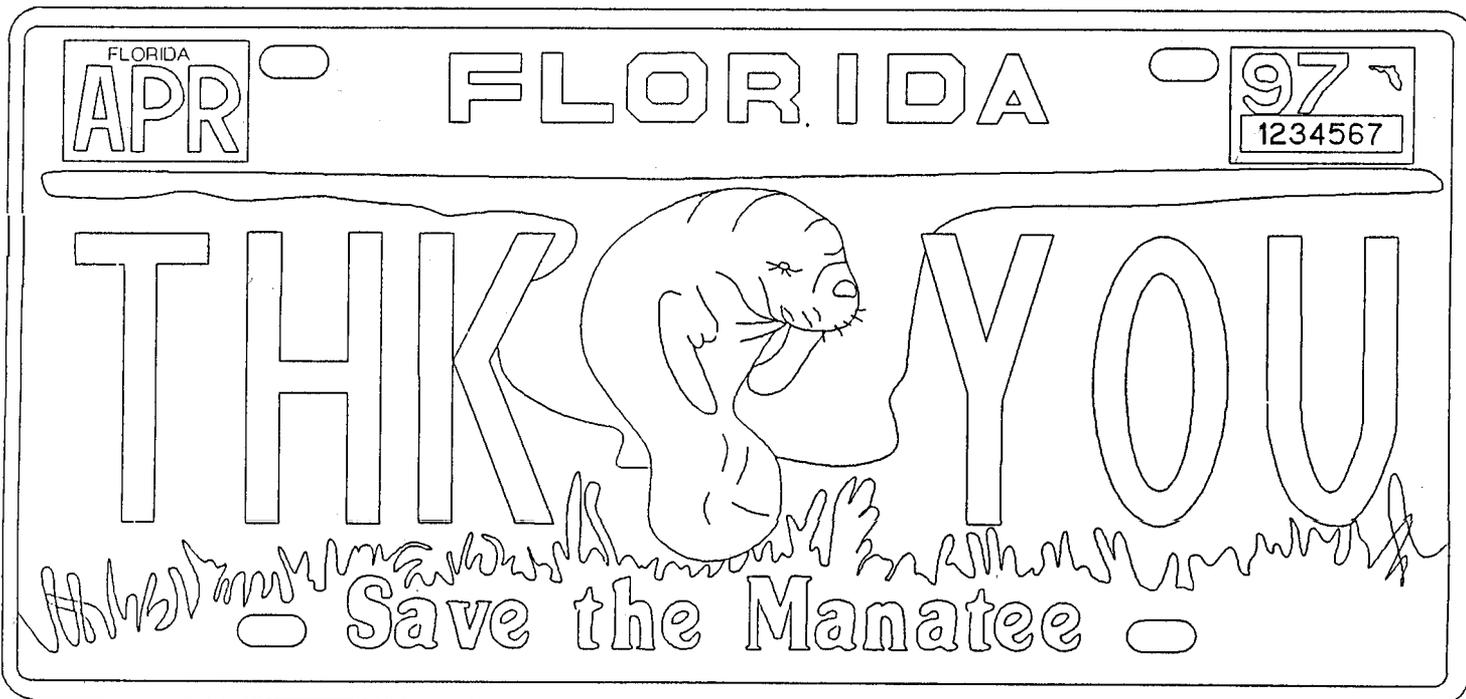
Use the space above to draw a manatee. You may use crayons, markers, or pencils. Be creative!

Help manatees stay "on the road to recovery."



Floridians support the Florida Department of Environmental Protection's manatee conservation, research and educational efforts by purchasing a special license plate for their cars and trucks. The example below is a thank you to them. This particular plate is painted on the back of special trailers used in manatee research.

Directions: Color the manatee gray and the tall letters red. The sea grass, which the manatees eat, should be green. Color the area around the manatee a light blue.



By purchasing one of these speciality plates, people of Florida help manatees. (If your family has a Save the Manatee license plate, THANK YOU for your support!)

To find out more information about the Save the Manatee license plate, visit the Florida Highway Safety and Motor Vehicle web site:
www.state.fl.us/hsmv/documents/specialindex/html

Manatee Information Survey

(In-state and Out-of-state)

1. Where did you get your manatee information materials? (check one)
_____ by mail _____ at a conference _____ at a special event _____ other: _____
2. How will you use these materials?
_____ school project _____ teach students _____ personal use _____ other: _____
3. Do you teach? YES NO (circle) If yes, what grade do you teach? _____
4. Where do you live? _____ Is this in Florida? YES NO
5. Name two things that you liked about the materials you received?
6. Name one thing that you did not like about the materials?
7. What are two things that you would do to improve these materials?
8. Did you learn anything new? YES NO
9. What are some things that you remember after reading the material?
 - a. _____
 - b. _____
 - c. _____
10. What are some behaviors that you will personally change because of the information you read?

Please provide us with your name and address: (Please Print)

Name: _____

Street Address: _____

City: _____ State: _____ Zip: _____

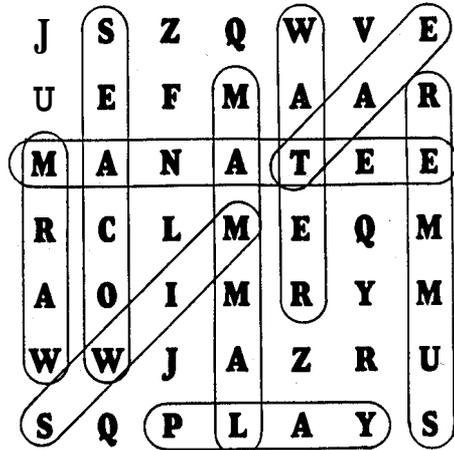
*** Remember to fill out
the survey inside and
mail it to the address below:**

Florida Department of Environmental
Protection
Division of Marine Resources
Bureau of Protected Species Management
Mail Station 245
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000



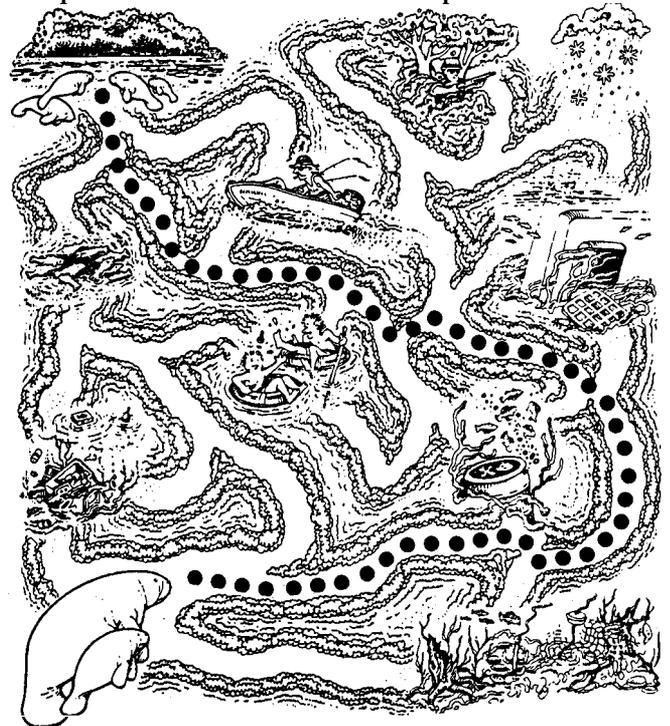
***Florida's
Environment...
Protect it today!***

**ANSWERS
Word Find**



Manatee Maze

Help the Manatee and her calf find the path to safe shelter.



Produced by Northeast Florida Regional Planning Council

It's Your Coast!

Florida Department of Environmental Protection
Division of Marine Resources