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# A Polluted Habitat



**Objective:** Given samples, the students will practice recycling items to “clean” a polluted habitat and demonstrate understanding by completing a class mural and illustrations in a minibook.

## Vocabulary

- endangered
- habitat
- pollute

## Materials

- *Protect the Ocean Habitat* minibook on pages 42–45
- large, shallow container, for “habitat” (e.g., water table)
- access to water
- large container to “wash” trash
- pollutants (paint, soap, plastics, oil)
- plastic fish and sea animals
- tongs or gloves
- trash samples (e.g., tin cans, soda cans, plastic snack food wrappers)
- blue bulletin board paper
- markers and crayons
- paper scraps and assorted craft materials
- ocean-themed magazines for cutting (optional)
- blue food coloring (optional)

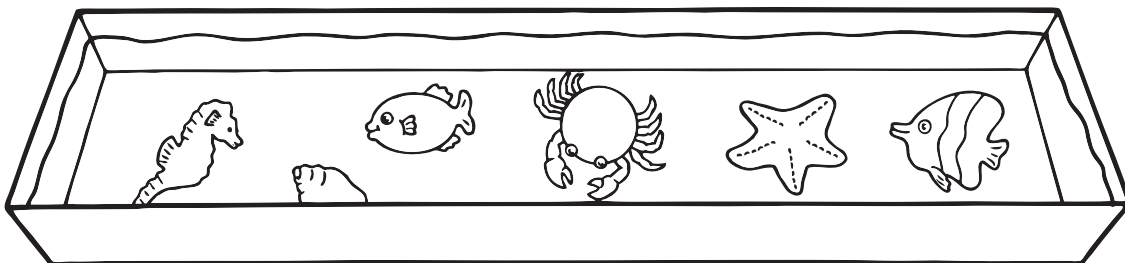


## Preparation

1. Fill the shallow container with water and add the plastic fish and sea animals to prepare the ocean habitat. If desired, add blue food coloring.
2. Clean the trash samples that will be added to the container during the presentation and later used in the mural.
3. Make copies of the *Protect the Ocean Habitat* minibook for each student.

## Opening

1. Ask the students what they know about *endangered* animals. Discuss some of the ways in which animals get classified as endangered (e.g., loss of habitat due to building; natural disasters; leaked, spilled, or dumped pollutants; inappropriate waste disposal; disease; climate changes).
2. Explain that there are ways to help keep animals safe, and that one way people can help is to be careful of what and where they throw things away. By reducing the trash and disposing of it safely, we can all help protect animal *habitats* (the places animals live).



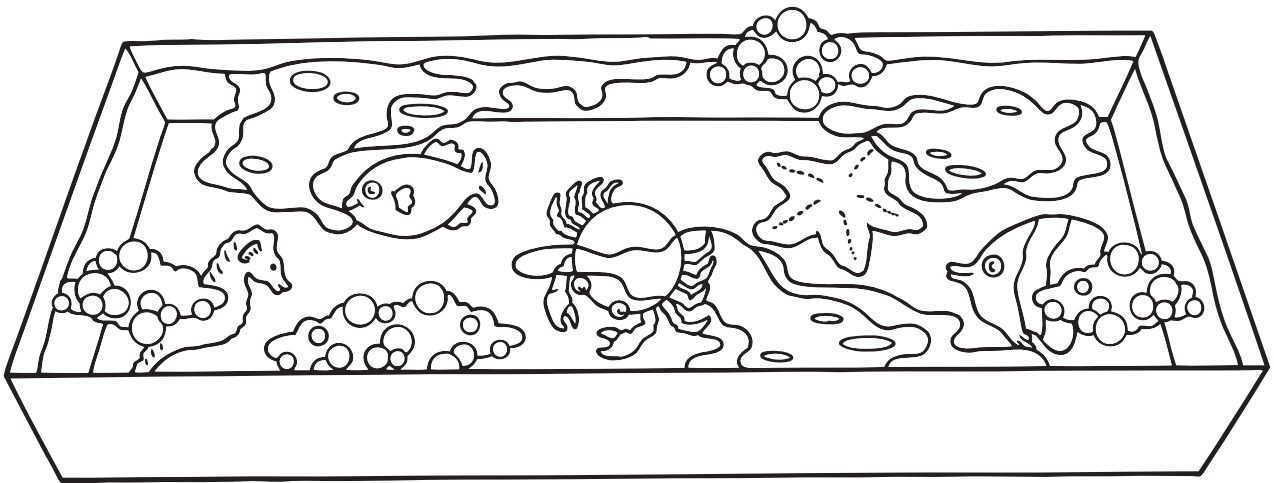


# A Polluted Habitat (cont.)



## Part 1

1. Place the ocean habitat where all the students can see it. Guide them to the notion that the representation is an ocean habitat and that this habitat is home to many different plants and animals. Brainstorm with the students a list of creatures that live in the ocean. Note those animals that are endangered, such as blue, grey, bowhead, and humpbacked whales; brown pelicans; great white sharks; and spotted dolphins.
2. Explain that the presence of trash in the ocean habitat is harmful and dangerous for the animals and plants. Animals and plants are at risk of dying because they may eat or get tangled in the trash. As more and more die, they become endangered. It is important to keep animal habitats clean to protect them.
3. While talking, “pollute” the ocean water by adding paint, soap, plastics, trash and/or oil. Give the students a few minutes to discuss what is represented as you quietly add more trash and pollutants. Trash *pollutes*, or ruins, the ocean. Ask, “Would you like to swim in this garbage? Would you like to eat food from this habitat?”
4. Have the students use tongs or wear gloves to remove the trash from the habitat and set it aside for later use. Next, have them remove the animals and clean them. Explain that sometimes after spills or other disasters, animals are brought to recovery centers to be cleaned. Unfortunately, this cannot be done for larger, deep ocean animals.



## Part 2

1. Ask the students to work together to create a mural of the ocean. Have them draw fish, sea mammals, plant life, birds, and an ocean floor.
2. Draw a line down the middle of the mural. On one side, allow the children to add the trash from the prior activity. Keep the other side of the mural free from garbage.
3. Label the mural, “Keep the Ocean Clean—Don’t Pollute!”

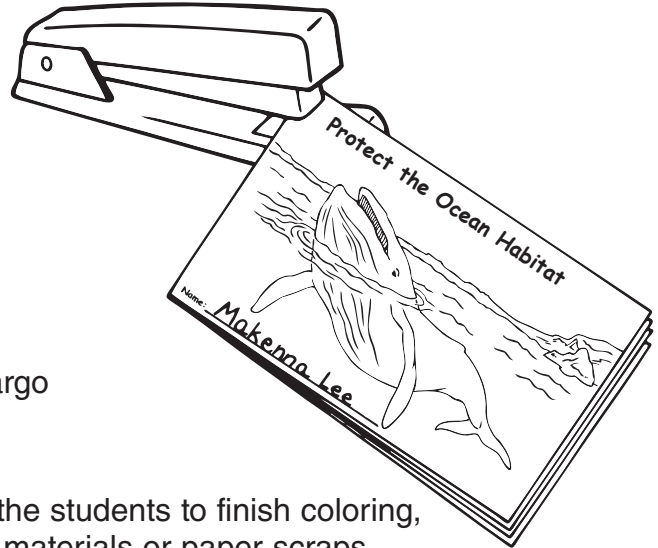


# A Polluted Habitat (cont.)



## Part 3

1. Cut out and assemble the *Protect the Ocean Habitat* minibook pages. Staple each book in the top left corner.
2. Read the minibook with the students. Explain that they will be adding an illustration to each odd-numbered page to complete the book.
3. Work page by page, asking the students to add the illustrations suggested below. Assist the children as needed.



- **Page 1:** Draw polluted water coming from a pipe, and trash in the river.
- **Page 3:** Draw trash from the beach going into the ocean waves.
- **Page 5:** Draw a boat (cruise ship, cargo ship or fishing boat) dumping trash.
- **Page 7:** Draw a clean ocean scene.

4. Once the illustrations are complete, invite the students to finish coloring, enhancing the pages as desired with craft materials or paper scraps.

## Closing

1. Read the completed *Protect the Ocean Habitat* minibooks together to review the unit.
2. Brainstorm one way the class can work together to protect the habitats of animals so that no more species will become endangered because of pollution.

## Extension

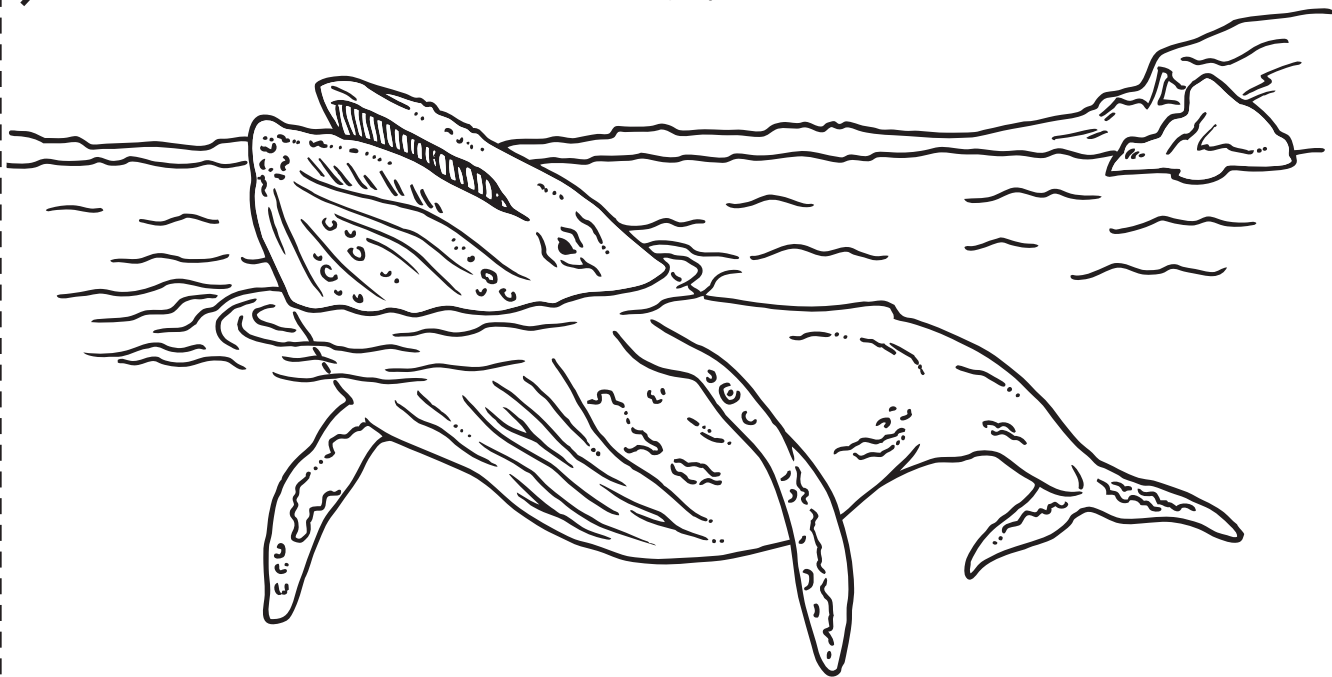
If possible, arrange for the class to take a field trip. Visit a pond, lake, stream, or ocean. Have the students wear gloves and pick up litter to help keep the habitat clean. Discuss ways in which picking up trash helps people, the water, and the animals and plants.

### ELL Tip

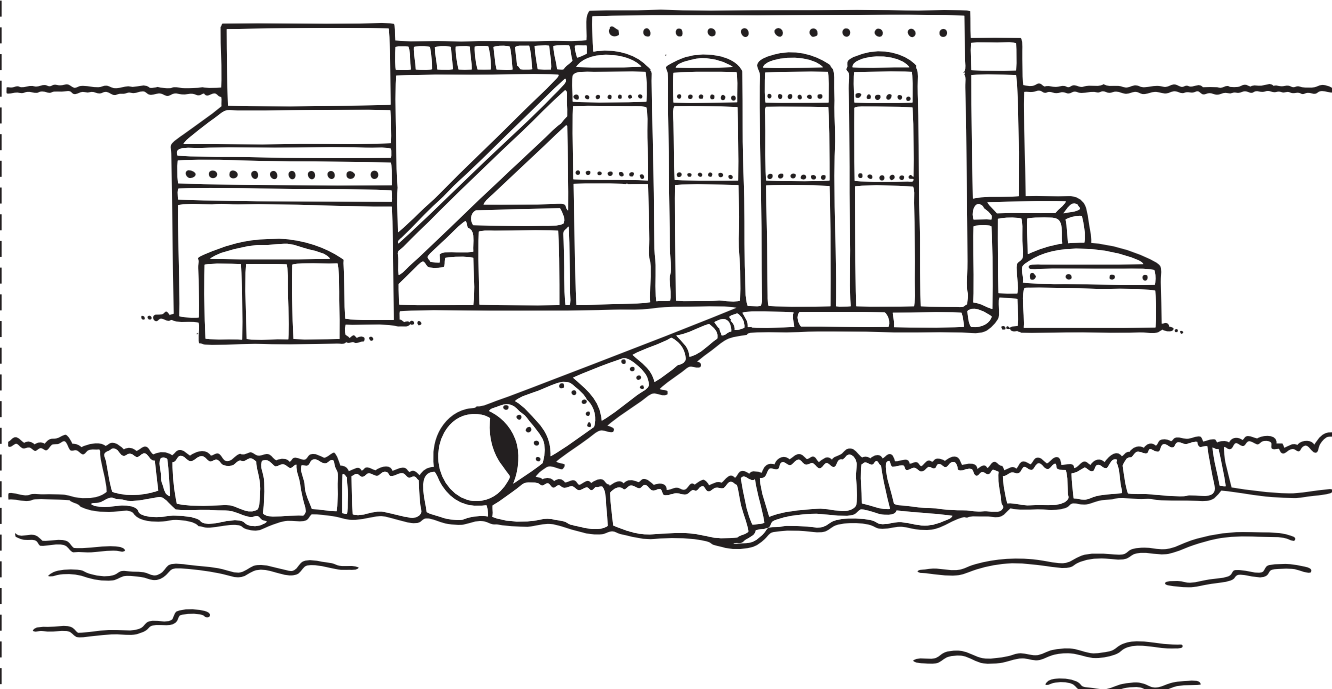
Have the students take turns reading their minibooks to an aide, parent volunteer, older study buddy, or teacher. Ask the students to describe their illustrations.

# A Polluted Habitat (cont.)

## Protect the Ocean Habitat



Name: \_\_\_\_\_



Litter from homes and businesses can pollute the water.

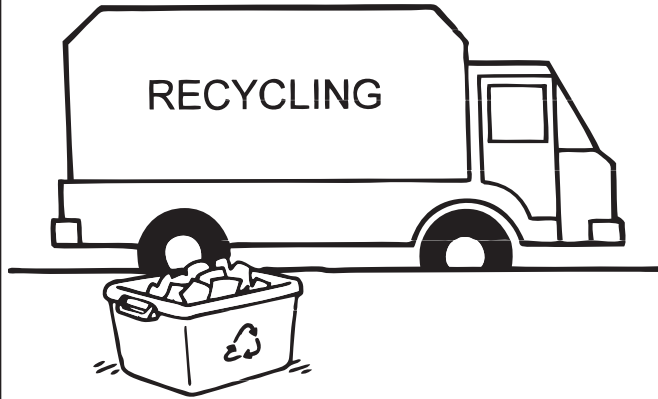
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# The Recycling Process



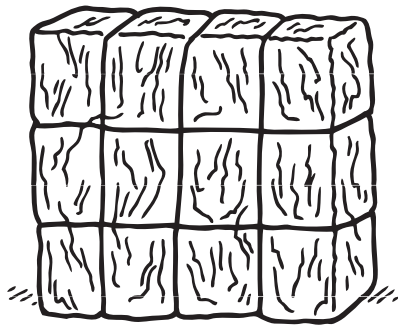
Recycling is picked up from curbside recycling bins.



Paper is taken to the recycling plant.



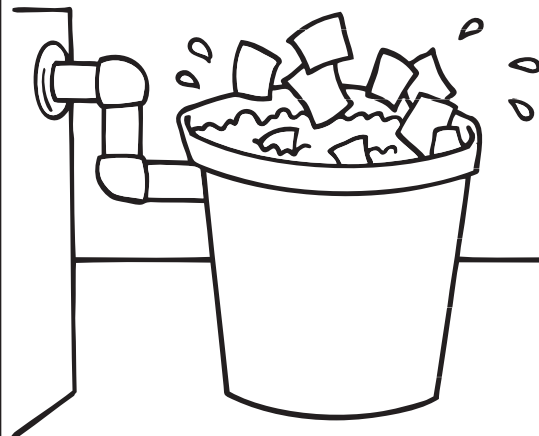
Paper is sorted and non-paper items removed (glass, plastic, paper clips, staples). The paper is compacted into bales.



Paper is ready for the paper-making process. It may be transported to a paper mill.



Paper is mixed with water to make pulp.



Pulp is washed, cleaned, shredded, and turned into slush in a blender.

