

LESSON 6

Habitat

Grades 4 - 7

Objectives

- To learn what habitat is and the components of habitat.
- To create a habitat for an animal that includes water, food, shelter, and space.

Materials

6 elastics with 4 strings attached to each, 12 pop cans, construction paper, tissue paper, crepe paper, scissors, glue stick

Concepts

- Intertidal (seashore) animals have needs for food, water, shelter, and space to survive, much like humans.
- A habitat is the natural home of a plant or animal.

Activities

1. The elements of habitat

A. What is habitat?

A. The natural home of a plant or animal, the place that it lives.

B. What does habitat consist of?

A: The elements that living things need to live are: water, food, shelter, space.

To emphasize the concept of “space,” have students try a short activity. Students move around the room. Each time the teacher calls freeze, students remain still. The teacher then makes the space to move around smaller and asks the students to move again. Each time the students freeze, the area becomes smaller until it is so small that it is difficult to move anywhere. Discuss why all animals need space and what might happen if humans or other animals didn’t have enough space. Compare the amount of space a limpet might need to the amount a whale might need.

2. Pop Can Habitat Activity

Preparation: Tie four 20 cm long strings onto an elastic band that is large enough to fit tightly onto a pop can. Make sure the strings are tied an equal distance apart.

Activity: Separate students into groups of four. Each group has 3 pop cans and one elastic band with 4 strings tied to it. Each string is labelled to represent one component of habitat (space, shelter, water, and food). Students must then work together to place one can on top of another *without* touching the cans or the elastic band. They do this by manipulating the elastic band with the strings so that it is wide enough to hold a can. Then they lift up the can and place it on top of the other can. They must then remove the elastic band, pick up and place the third can on top of the other two. Each student can only hold onto one string.

Try the activity with only 3, 2 and then one student. Each student can only hold onto one string.

Discussion: What happens? Why do animals need all 4 parts of their habitat? Discuss what happens if an animal doesn’t have enough space, shelter, water or food.

3. Habitat needs

A. Could you survive if you didn’t leave your bedroom at all?

A. No, because you need to leave to get food, go to the bathroom, visit friends, etc.

B. Brainstorm and discuss intertidal creatures.

i. How are they alike and different from humans?

ii. What do different marine creatures need to survive?

A. They need different types of food and shelter and different amounts of space.

iii. Compare purple shore crabs, kelp crabs and dungeness crabs. How are their habitats different?

A. Purple shore crabs live under rocks and are small, so rocks do not have to be very big.



Kelp crabs live in algae (seaweed), hanging onto seaweed for protection. Dungeness crabs live on sandy bottom and bury themselves in the sand when they need to hide.

7. Intertidal habitats

There are many different kinds of habitat in the ocean.

A. Have students brainstorm different intertidal habitats.

Examples include eelgrass, mud flat, sandy beach, cobble beach, rocky shore and estuaries.

B. Have students brainstorm other kinds of ocean habitat.

A. Examples include kelp forests, rocky underwater, sandy underwater, seamounts (underwater mountains), ocean trenches.

8. Creating Habitat

Have students choose a particular marine animal and then construct a 3 dimensional habitat that includes everything the animal needs to survive.

Conclusion

- Review what habitat is.
- Discuss some different ocean habitats.
- Look at pictures of different local intertidal habitats.

Extension

Students can study the habitats near their home and the creatures that live there. Examples include rocky shores, sandy beaches, mud flats and estuaries.