

Activity: Food Web in a Bag

Grade Level: PreK (ages 3-5)

Objectives:

Students will be able to:

- explain what a consumer is (ecosystem/food web context)
- name the basic components of a food web (see Vocabulary)
- cite at least three examples of predator/prey (a predator and a common prey item)

Background Information:

Think of your favorite animal. What does it like to eat? How does it get its food? Does it provide food for other animals? Find out the answers by building a food web.

Imagine a spider web. It looks like many strings woven together. A food web is very similar. It connects plants and animals in more than one way.

Each ecosystem has a unique food web. An ecosystem is an area where animals and plants interact with their environment. Food webs start with producers, or plants. Can you think of some animals that eat plants such as flowers, grass, leaves?

Next, we have consumers. Consumers eat plants or other animals. Think of a lion. What do lions like to eat? Do they only eat one thing? Now imagine a small lizard. That lizard may eat bugs, making it a consumer and something called a predator. A predator is an animal that hunts and eats other animals. Now this might seem tricky but some birds like to eat lizards, so lizards can also be prey. The word prey means an animal that is eaten by another animal or sometimes a plant.

For this activity, we are going to focus on a marine food web. Try it with the animals provided, and then pick out your own animal! How many connections can you make in your food web?

Vocabulary

Ecosystem: a biological community of interacting organisms and their physical environment

Producer: organisms that create their own food

Consumer: animals that get their food from plants or other animals

Carnivore: an animal that only eats other animals

Herbivore: an animal that only eats plants

Omnivore: an animal that eats both plants and animals

Predator: an animal that eats other animals

Prey: an animal that is eaten by other animals or plants

Materials:

- Brown paper bag
- Animal print outs (predators)
- Animal/plant print outs (food)
- Tape
- Scissors

Procedures:

How-To Activity:

1. Print a photo of a great white shark, manatee, leatherback sea turtle, and blue whale (predators). Feel free to substitute any of these animals. Try to choose ones that eat different things or a variety of items.
2. Tape each one of these four animals to a paper bag. The paper bag represents the ocean.
3. Print and cut out a food item (prey) for each animal:
 - a. Great white shark-sea lion
 - b. Manatee-sea grass
 - c. Leatherback sea turtle-sea jellies
 - d. Blue whale-krill
4. Match the food item with each animal by placing it in the bag. Print additional food items out to make it more challenging.
5. Discuss meat eaters, plant eaters, and animals that eat both.

After Activity Questions:

1. How does pollution affect our oceans?
2. If an animal disappears from the food web, what can happen?
3. What happens to our food web if we have too many great white sharks?