Discover!

Science

SAMPLE PDF

INSTRUCTOR GUIDE

4

Plants and Animals in an Ecosystem

Lesson Objectives

By the end of this lesson, your student will be able to:

- identify how plants and animals get food
- describe different types of animal shelters
- identify why some animals work together in an ecosystem

Supporting Your Student

Explore

Help your student to understand that the venus flytrap and other carnivorous plants do not trap flies to get energy. These plants do not eat insects like a human. These plants still use photosynthesis to make food. However, because nutrients are lacking in their environment, venus flytraps and other carnivorous plants trap insects to absorb extra nutrients.

Take a Closer Look *(Plant Comparison)*

Pansies or petunias are both good and economical choices for the plants in this experiment. Ask your student which plant they think will be healthier at the end of the week. If you want to extend the experiment longer, it will show even more of a contrast between the "light" and the "dark" plant. Be sure to keep both plants watered the same amount; that way, the only thing different between the two trials is the light. After the experiment, discuss with your student the results and whether or not they match their prediction.

Create

Some examples of shelters your student can create include using sticks and grass to make a nest, using clay to make a cave or burrow, or using string or yarn to make a web.

Learning Styles

Auditory learners may enjoy creating a video or audio file where they discuss different ways in which animals can work together or different types of animal shelters. They may also benefit from a read aloud of the ways plants and animals get food, types of animal shelters, and ways that animals work together.

Visual learners may enjoy drawing and labeling examples of the different types of consumers and producers.

Kinesthetic learners may enjoy creating a skit or acting out how an animal might look for food, based on the type of consumer it is.

Extension Activities

Animal Shelters Book

Have your student create a booklet in a three-ring binder with a title page, table of contents, and a page for each of the types of animal shelters in the worktext. Each page should define the shelter, have a picture or drawing of that type of shelter, and give at least one example of an animal that lives in that type of shelter.

Nature Walk

Take a walk or hike with your student in a park, on a walking path, or in another natural area near your home. As you walk, look for signs of animals and animal homes. Look for things like holes in the ground caused by burrowing animals, ant hills created by a colony of ants, or bird nests. Discuss with your student all the types of animal shelters that they know and talk about which ones they are most likely to see.

Plants and Animals in an Ecosystem

Answer Key

Explore

Most plants get their food through photosynthesis. Some plants eat meat because the soil they grow in does not have all the nutrients they need.

Write ***(How are plants and animals different in the way that they get food?)***

Answers may vary. Possible answer: Plants make their own food through photosynthesis. Animals eat other animals or plants to get their food.

Write ***(Why don't sharks usually eat remora fish?)***

Answers may vary. Possible answer: The remora fish helps the shark by cleaning the teeth and skin of the shark, so the shark does not eat the remora.

Write ***(What are the different types of shelters that animals can live in?)***

Answers may vary. Possible answer: Animals can live in dens, burrows, nests, hives, hollowed trees or logs, caves, shells, and webs.

Practice

Grass	→	the sun
Deer	→	the field of grass
Grizzly Bear	→	the salmon in the stream
Earthworm	→	the rotten log

Take a Closer Look ***(Plant Comparison)***

Hypotheses may vary. Possible answer: I think the plant on the windowsill will grow while the plant in the dark closet or cabinet will wilt.

Answers may vary. Possible answers: The plant on the windowsill did grow while the plant in the dark closet or cabinet wilted. This means that plants need sunlight in order to grow.

Show What You Know

1. False
2. True
3. True
4. C
5. A
6. B
7. B
8. A