

What's Eating You?

Cross-Curricular Focus: Life Science



All the living things in an ecosystem have a role to play. Plants are **producers**. Inside their green leaves they have round discs called chloroplasts. They are in stacks called grana. A green substance called chlorophyll fills the chloroplasts. It is what gives plants their green color. The chloroplasts allow plants to use water, sunlight and carbon dioxide to produce their own food. That's why they are called producers.

When an animal eats a plant, energy that the plant got from the sun is transferred to the animal. An animal that eats plants is called an herbivore. Since it is the first animal in the food chain, it is also the primary **consumer**. A consumer is an animal that eats plants or other animals. Consumers that eat only other animals are called carnivores. Consumers that eat both plants and animals are called omnivores.

Producers are critical to the survival of all living organisms in an ecosystem. Consumers depend on producers for the food which gives them energy. None of the other living things in the ecosystem would survive for long without producers.

Many plants make seeds by combining pollen from their flowers with pollen from other flowers. Water or wind occasionally help pollen get where it needs to go. Sometimes it is carried by animals, especially birds and insects.

Since some animals eat plants, it makes sense that animals sometimes help plants to reproduce, or make more plants. These animals that help plants reproduce by carrying pollen from one plant to another are called **pollinators**. Larger animals often help plants reproduce without even realizing it. Some seeds are caught in animal fur or eaten with fruit from the plants. The animal carries seeds from one place to another so plants can spread to new places. The seeds are deposited and grow in their new locations. Carrying and scattering plant seeds so they will have the opportunity to expand to new areas is called **seed dispersal**.

Name: _____

Answer the following questions based on the reading passage. Don't forget to go back to the passage whenever necessary to find or confirm your answers.

1) What is the relationship between producers and consumers?

2) What is the ultimate source of energy for all living things?

3) How do animals help ensure that plants reproduce?

4) Give an example of a pollinator.

5) Describe a food chain with at least three links. What is the producer? What is the primary consumer? What is the secondary consumer?
