

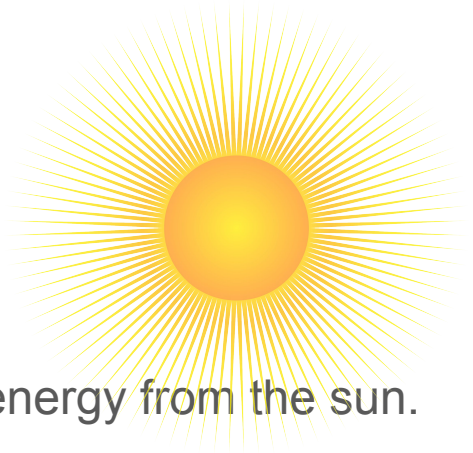
# Relationships in Ecosystems

## Chapter 3 Lesson 3



# Producers

- Every organism in an ecosystem relies on producers.
- Producers are organisms that make their own food by using energy from the sun.
- Producers on land include green plants.
- Producers in the water include algae and other protists.



# Consumers



-Consumers are organisms that can not make their own food. Birds, mammals, and other consumers get their energy from food made by other organisms.

-For example: A rabbit is a consumer. A rabbit eats plants and plants are producers. Also, a lion is a consumer. Lions eat other animals.

-Consumers are classified by the kinds of food they eat. We classify into them three groups: herbivore, carnivore, omnivore.



# Herbivore

-Herbivores eat only producers. This means they eat only plants.

Examples of herbivores:

Porcupines, rabbits, deer, and most rodents.



# Carnivores

-Carnivores are animals that eat meat. They eat other animals that eat meat and animals that eat plants. Some of them will even eat their own kind.

Examples of carnivores:

Cats, tigers, lions, sharks



# Omnivores

-Omnivores are animals that will eat plants, animals or both!

Examples of omnivores are:

Opossums, raccoons, bears, and YOU!





# Decomposers



**-Some organisms break down dead and decaying matter into wastes and simpler substances. These organisms are known as decomposers.**

**Examples of decomposers:**

**Worms, fungi, bacteria**

**-They return the substances back to the ecosystem as nutrients.**

**Decomposers are like recyclers!**

# Food Chain

-A food chain shows different kinds of organisms and their relationships to one another. The energy in a food chain moves from producers to consumers to decomposers.

-Check out the diagram on page 152 and 153 of your textbook to see how a food chain works.





# Food Web

- While a food chain is a good model of how energy travels in the form of food, a food web shows how all the the food chains in an ecosystem are connected.
- Food webs show relationships between predators and prey.
- Predators are carnivores that hunt for food. The animal that gets hunted prey called prey.
- In many food webs, some animals are predators and prey.
- \*Check out the food web on 154 and 155.

# Energy Pyramid

-An energy pyramid is a model that shows the amount of energy at each level of a food web. Producers are always at the bottom, or the base.

-It's important that there are more producers than consumers in an ecosystem in order to keep the ecosystem in balance.

