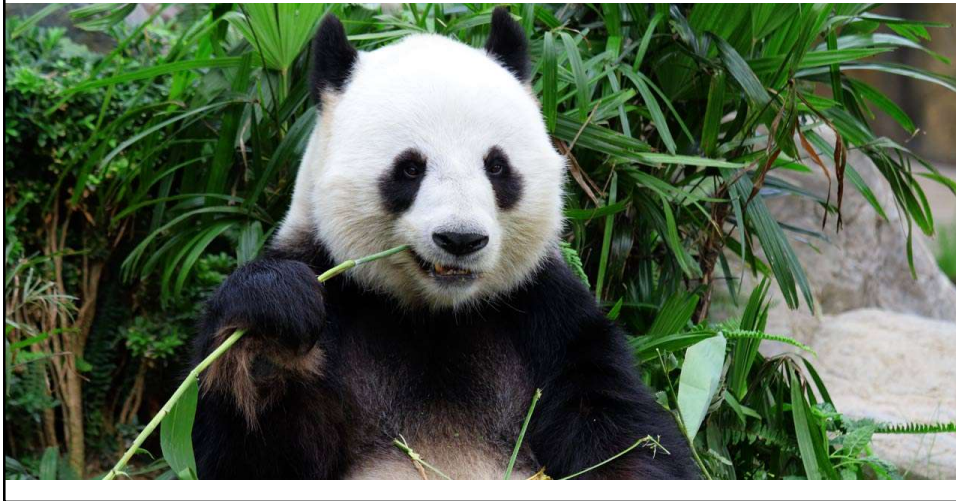


Lesson 4: Energy Flow in Ecosystems



1



All new energy in an ecosystems comes from the sun. The sun provides light energy and heat energy to ecosystems.

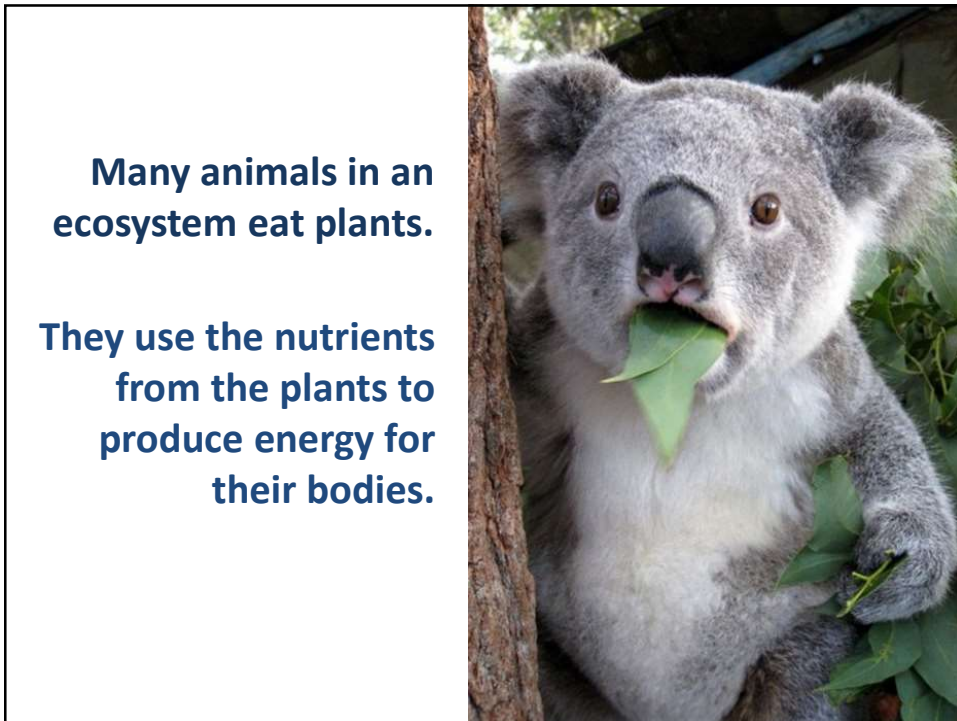
2



Through a process called photosynthesis, plants use sunlight to produce chlorophyll.

This chlorophyll serves as food for the plant and gives plants their green color.

3



Many animals in an ecosystem eat plants.

They use the nutrients from the plants to produce energy for their bodies.

4

Other types of animals get energy for their bodies by eating other animals in the ecosystem.



5

Different organisms in an ecosystem are classified based on how they get their energy.



6



Organisms that can make their own energy using sunlight are called producers.

The plants in an ecosystem are the producers.

Producers are the source of all food in ecosystems.

7




Organisms that obtain energy by feeding on other organisms are called consumers.

Consumers are unable to make their own food.

Consumers are classified based on what they eat.



8

		
<p>Herbivores are organisms that eat only plants.</p>	<p>Carnivores are organisms that eat only animals.</p>	<p>Omnivores are organisms that eat both plants and animals.</p>

9

	<p>Decomposers are organisms that break down waste and dead organisms.</p> <p>The job of decomposers is to return raw materials to the ecosystem.</p> <p>The most common types of decomposers are fungi and bacteria.</p>
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10

Discovery Education Video:**Energy Flow in Ecosystems**

The flow of energy in an ecosystem begins as sunlight that green plants convert into food. Food is a form of chemical energy. Plants are called producers and because animals eat plants and other animals, they are called consumers. Bacteria and fungi are decomposers. Energy is lost as heat as it flows through the ecosystem.



11

**Discovery Education Video:****Producers, Consumers, and Decomposers**

One way ecologists classify organisms is according to how they get their food. The three classifications include producers, consumers, and decomposers

12

Energy Flow in Ecosystems: Key Questions

- 1. Where does the flow of energy in an ecosystem begin?**
- 2. What are the roles of producers, consumers and decomposers in an ecosystem?**
- 3. What are the three types of consumers and their characteristics?**
- 4. What would happen in an ecosystem if there were no decomposers?**