

Chapter 6: Energy in Ecosystems

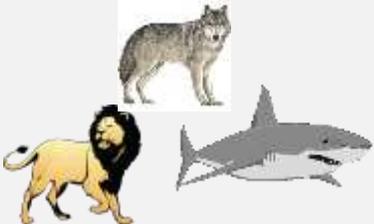
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Test on FRIDAY, NOVEMBER 20th

Living organisms are categorized into:

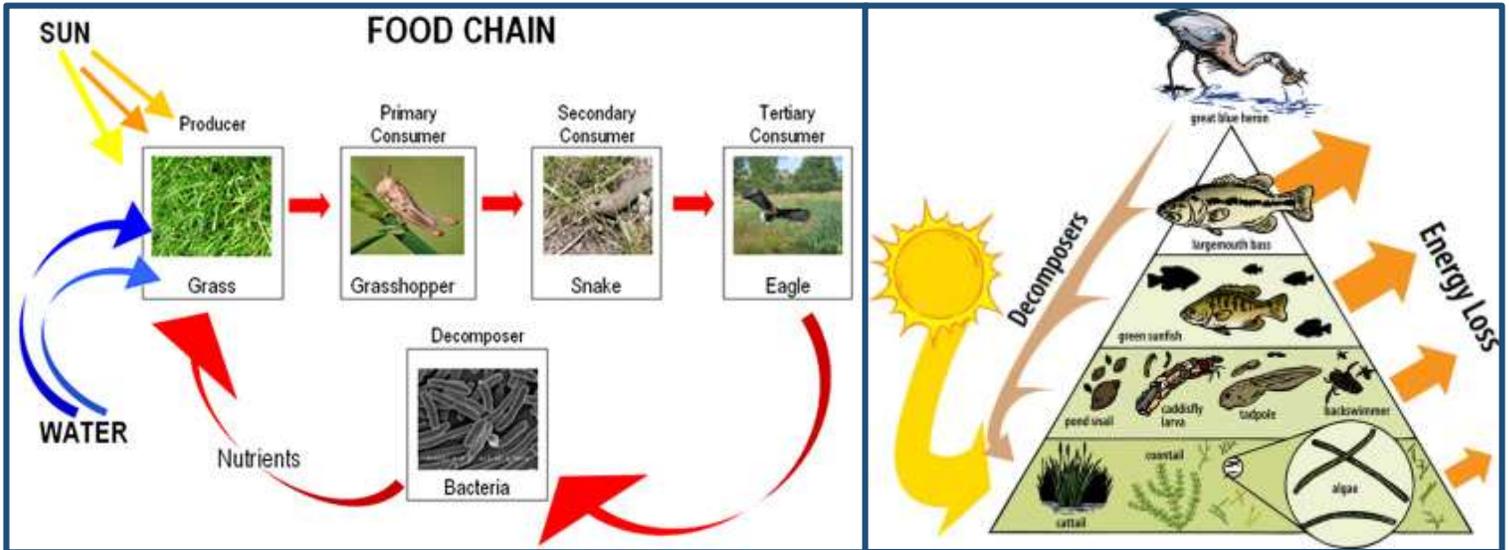
<p>producers</p>	<ul style="list-style-type: none"> - can make their own food by using the energy from the sun (<i>also using air, soil, and water</i>) - this process is called photosynthesis - producers start most food chains 	<p>example: <i>tomato plant</i></p> 
<p>consumers</p>	<ul style="list-style-type: none"> - cannot make their own food - gets energy from eating - all animals are consumers 	<p>example: <i>tree frog</i></p> 
<p>decomposers</p>	<ul style="list-style-type: none"> - gets energy by breaking down dead plants and animals - bacteria and fungus are the most common decomposers - connects the beginning and end of the food chain - adds nutrients to the soil 	<p>example: <i>earthworm</i></p> 

There are three kinds of consumers:

Herbivore	Carnivore	Omnivore
<p><i>eats only producers (plants)</i></p>  <p>examples: <i>deer, rabbit, zebra, cow, horse, panda</i></p>	<p><i>eats only consumers (animals)</i></p>  <p>examples: <i>lion, wolf, crocodile, frog, fox, shark</i></p>	<p><i>eats both producers and consumers (plants/animals)</i></p>  <p>examples: <i>human, bear, pig, raccoon</i></p>

Food Chains

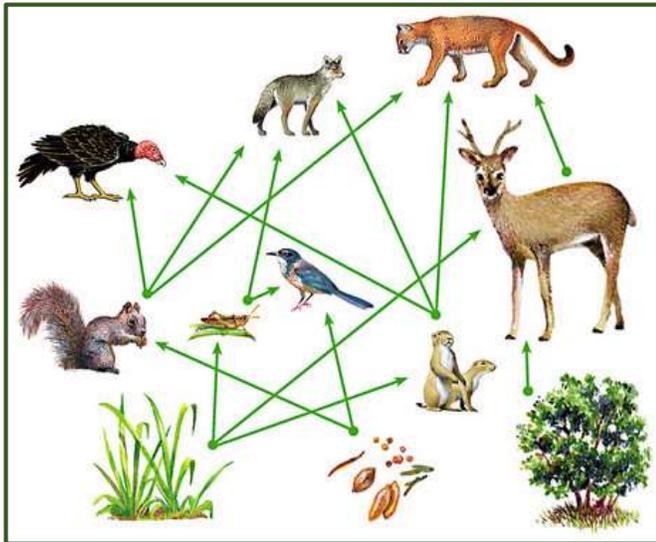
- A food chain shows how energy is passed from one organism to another.
- More energy is passed from one level to the next.
- The sun provides all the energy for the food chain to begin.
- LESS energy is passed from one level to the next



Food Web

- show how many organisms are connected within an ecosystem

- Food webs are many food chains combined



prey	an animal that is hunted and eaten for food
<i>A gray wolf hunts and eats a rabbit. The rabbit is prey.</i>	
predator	an animal that hunts other animals for food
<i>A robin pulls an earthworm from the ground and eats it. The robin is a predator.</i>	

Habitat

- A habitat is an environment that meets the basic needs of a living thing
- Ask yourself: WHERE does the organism live?

For example, a bear lives in the forest and uses a cave to hibernate.

vs. Niche

- Each living thing in a habitat has a role, or **niche**.
- A niche describes how a living thing interacts with its habitat.
- Ask yourself: WHAT is the organism's job?

For example, a sunflower provides food for birds, oxygen for animals, and also shelter for plants/animals.