

Food Chains and Webs

1. All Living Things are made up of cells.
2. All Living Things need food and water.
3. All Living Things must grow.
4. All Living Things must reproduce.
5. All Living Things must be able to respond to changes in the place where it lives.
6. All Living Things must die.

A **Food Chain** is a cycle of food/energy consumption that begins and ends with plants.

A **Food Web** is a series of food chains that overlap within an ecosystem.

Photosynthesis – is the process in green plants when sugar (food) is formed from carbon dioxide (CO₂) and water (H₂O), with the help of the sun's energy.

- **Producers** – produce energy within a food chain. They are grasses, shrubs, trees, fruits, nuts, grains, etc.
- **Primary Consumers** – consume energy. They are grazing animals. For example: rabbits, sheep, cows, squirrels, parrots, antelope, grasshoppers, beetles, caterpillars, etc. These are animals called **herbivores** that only eat plants.
- **Secondary Consumers** also consume energy within the food chain, but will eat both plants and animals. Omnivores. (example: chimpanzees, humans, dogs, cats, wolves, birds, etc.)
- **Tertiary Consumers** also consume energy within the food chain, but only eat meat. Carnivores are the meat-eaters of the food chain, the top of the food chains, so to speak. Nothing eats them.... (examples: humans, bears, lions, hawks, foxes, wolves, coyotes, eagles, etc.)

- **Scavengers** – a quick note about scavengers, they consume energy from dead animals. They are still considered carnivores, but prey only upon dead creatures. Think of them as part of the clean up crew. (examples: hyenas, crows, vultures, etc.)
- **Decomposers** – help break down dead and decaying matter into nutrients for the soil. Also part of the clean-up crew! *note: decomposer can not produce their own food with the help of the sun, because they do not have chlorophyll!(examples: mushrooms, lichens, bacteria, fungi)
- **Energy** - is transferred in small bite-size chunks throughout a food web. For instance, as energy moves through the food chain, there is less and less of it to go around. That is the main reason there are not very many big, fierce predators compared to the amount of herbivores. There is not enough energy for them.

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