**Food Chain Notes**

Energy flows through an ecosystem in one direction along a food chain. The sun is the main source of energy for life on Earth.

Plants use energy from sun to make food (photosynthesis). Plants are **autotrophs** (self feeders) because they make their own food. Animals are **heterotrophs**. They eat other organisms. Plants are also called **producers**. Animals are **consumers**.

**Food Chain**

![Food Chain Diagram]

**Food web** = many food chains put together. The arrow always points towards the predator.

- **Herbivores** eat only plants.
- **Carnivores** eat only animals.
- **Omnivores** eat both plants and animals.

**Detritivores** eat dead organic matter. ** Decomposers** are detritivores that break down organic matter into simpler compounds. (fungi)

In a food chain energy flows from the sun to producers (plants) to consumers to decomposers. Decomposers break down dead stuff.

**Keystone Species**: An important species that affects many others in a food web. Example: If frogs are eliminated, crickets increase and owls decrease.
Animal Behavior Notes

Behavior - the way an organism responds to the environment

Innate behavior - behavior not learned through experience

Reflex - involuntary response to a stimulus. requires no thinking (shivering when cold)

Instinct - a complex innate behavior (mating rituals)

Territory - area that contains everything an animal needs to survive and reproduce. Animals will protect their territory with territorial behavior

Territorial behavior - keeping competitors out of one's territory (male squirrel chases another away)

Migration - instinctive movement of a species

Hibernation - spending winter in an inactive state

Estivation - reduction in metabolism in response to heat

Learned behavior - gained by experience (chimpanzees using sticks to gather termites)

Habituation - an animal ignores a repeated stimulus if it is not harmful (deer in some areas ignoring people)

Imprinting - response to a stimulus shortly after birth (a duckling will believe a human is its mother if exposed to one after hatching)

Ducklings imprint onto their mother and follow her