



*Ecology Terms:*

- **Ecology:**
  - The branch of biology dealing with the study of relationships of livings and their environments.
  - The scientific study of interrelationships between living and nonliving parts of the world.
  - From Greek “oikos” and “eco” meaning household or habitat.

*Ecology Terms:*

- **Biosphere:**
  - The thin zone of Earth that supports life.
  - Broken into biomes (groups of ecosystems.)
  - The 8 km above the Earth’s surface to 11 km below the Earth’s surface.
  - The atmosphere to the bottom of the ocean.

*Ecology Terms:*

- **Biome:**
  - A group of ecosystems having a similar climate and similar dominant communities.
- **Ecosystem:**
  - All the living and nonliving parts of the environment.
  - All ecosystems are able to support themselves.
  - Interactions between biotic factors and abiotic factors of communities.

*Ecology Terms:*

- **Ecosystems factors:**
  - Biotic factors: living organisms in an ecosystem.
  - Abiotic factors: nonliving parts of an ecosystem; what makes up the physical environment.
    - ie: air, air currents, temperature, moisture, water, sunlight, rock, soil ...

*Ecology Terms:*

- **Ecosystems are one of two types:**
  - Terrestrial Ecosystems: Located on land
  - Aquatic Ecosystems: Located in water
    - freshwater
    - saltwater (aka marine) accounts for 75% of Earth’s surface)

### *Ecology Terms:*

- **Communities:**
  - All of the organisms living in the same area/location.
  - Made up of populations.
- **Populations:**
  - All of the organisms of the same species living in the same area/location and interbreed.
  - Compete with one another for food, water, mates, etc.

### *Ecology Terms:*

- **Species:**
  - A group of organisms sharing very similar characteristics and can breed to produce fertile offspring.
  - Organisms that look alike and can reproduce among themselves.

### *More terms:*

- **Habitat:**
  - The place/location where an organism lives out its life.
  - Provides food, water, and shelter
- **Niche:**
  - An organism's role in a community
  - Everything an organism does and needs in a habitat.
  - Also... food, space, and other conditions for organisms reproduction and survival and how a species affects its environment.

### *Cycles:*

- **Cycles:** Allow substances to be reused; allow substances to pass through biotic and abiotic factors as they go through a cyclical pathway.
- **Important Abiotic Cycles:**
  - Oxygen/Carbon dioxide cycle
  - Water Cycle
  - Nitrogen Cycle
  - Phosphorus Cycle