

## New Terms - Biology, the Science of Life

<b>bio</b> -	life, living things
<b>eco</b> -	environment
<b>photo</b> -	light
<b>synthesis</b> -	process of putting simpler building blocks together to form more complex blocks
<b>logy</b> -	study of
<b>biology</b> -	the study of life or living things.
<b>environment</b> -	the surroundings of any organism.
<b>ecology</b> -	the study of the environment.
<b>photosynthesis</b> -	the process by which plants transform the energy of the sun into usable energy as sugars.
<b>metabolism</b> -	the exchange of chemical matter with the outer environment and the transformation of organic material within the cells of an organism. Generally involves the release or use of chemical energy.
<b>energy</b> -	the ability or capacity to make things happen or do work.
<b>growth</b> -	the process in which an organism increases in size by taking in material from the environment and organizing it in its own structures.
<b>reproduction</b> -	the ability of living things to produce copies of themselves.
<b>asexual reproduction</b> -	reproduction that involves only one parent and results in cells that are generally identical to the parent. Commonly seen in plants, simple animals, and bacteria.
<b>sexual reproduction</b> -	reproduction that involves two different parents joining to form a new individual. Includes a combination of new traits. Generally seen in more complex organisms.
<b>evolution</b> -	the ability that organisms have to adapt to their environment.
<b>atom</b> -	the smallest particle of matter containing the properties of an element.
<b>subatomic particle</b> -	particles that make up an atom - proton, neutron, and electron.
<b>proton</b> -	positively charged particle within the atom.
<b>neutron</b> -	particle within the atom that has no electrical charge, but the same weight as a proton.
<b>electron</b> -	particle that surrounds the proton and has a negative charge.
<b>element</b> -	fundamental building block of matter.
<b>molecule</b> -	a unit of two or more of the same or different elements joined together.
<b>organelle</b> -	small sacs or compartments inside a cell that perform specific functions. For a cell they would be compared to something like our stomach or heart.
<b>cell</b> -	the smallest living unit which could live independently or form part of an organism.

- tissue** - a group of cells that have a similar structure that perform a specific activity.
- organ** - a unit of tissues that perform a specific function, like the heart, a leaf or an eye.
- organ system** - two or more organs that act together to perform an activity.
- organism** - a unit composed of specialized cells, tissues, organs, and usually organ systems. Generally any living plant or animal.
- population** - the total number of individuals of a species or form of plant or animal that live in the same area.
- community** - the population of all species living in the same area.
- ecosystem** - the community and its environment.
- biosphere** - the part of the Earth's surface and its immediate atmosphere where organisms live.
- producer** - organisms capable of making organic material using the light from the sun, mainly plants. (?)
- consumer** - any organism that consumes other organisms, like carnivores and herbivores.
- decomposer** - organisms that feed on the remains of other organisms, like bacteria and fungi.
- cycle of life (food chain)** a cycle in which organisms are arranged in such a way that one group feeds on the group that comes before it. For example, a cow (consumer) eats grass (producer).
- DNA** - (deoxyribonucleic acid) the "blue-prints of life"; a molecule found in most organisms that controls the structure of proteins.
- species** - lowest grouping of plants or animals.
- herbivore** - plant eater.
- carnivore** - meat eater.