

New Terms - Biology, the Science of Life

bio	-	life, living things
eco	-	environment
photo	-	light
synthesis	-	process of putting simpler building blocks together to form more complex blocks
logy	-	study of
biology	-	the study of life or living things.
environment	-	the surroundings of any organism.
ecology	-	the study of the environment.
photosynthesis	-	the process by which plants transform the energy of the sun into usable energy as sugars.
metabolism	-	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.
energy	-	the ability or capacity to make things happen or do work.
growth	-	the process in which an organism increases in size by taking in material from the environment and organizing it in its own structures.
reproduction	-	the ability of living things to produce copies of themselves.
asexual reproduction	-	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.
sexual reproduction	-	reproduction that involves two different parents joining to form a new individual. Includes a combination of new traits. Generally seen in more complex organisms.
evolution	-	the ability that organisms have to adapt to their environment.
atom	-	the smallest particle of matter containing the properties of an element.
subatomic particle	-	particles that make up an atom - proton, neutron, and electron.
proton	-	positively charged particle within the atom.
neutron	-	particle within the atom that has no electrical charge, but the same weight as a proton.
electron	-	particle that surrounds the proton and has a negative charge.
element	-	fundamental building block of matter.
molecule	-	a unit of two or more of the same or different elements joined together.
organelle	-	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.
cell	-	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.