

APES Essential Vocabulary

Abiotic	Pertaining to factors or things that are separate and independent from living things; nonliving
Anthropogenic	Of, relating to, or resulting from the influence of human beings
Aquifer	An underground layer of porous rock, sand, or other material that allows the movement of water between layers of nonporous rock or clay. Aquifers are frequently tapped for wells.
Arable	Land that is fit to be cultivated
Atmosphere	The gaseous mass or envelope surrounding Earth, which is retained by a gravitational field
Bioaccumulation	The accumulation of a substance, such as a toxic chemical, in various tissues of a living organism
Bioconcentration	The accumulation of toxin molecules and the resulting concentration of these molecules in organisms' tissues
Biomagnification	The process by which the concentration of toxic substances increases in each successive link in the food chain.
Biomass	The amount of living material, or the amount of organic material contained in living organisms, both as live and dead material, as in trees: the leaves are alive and the stem wood is dead
Biome	A kind of ecosystem. The rain forest is an example of a biome. Similar biomes generally occur in a small range of latitudes
Biosphere	The part of the earth and its atmosphere in which living thing organisms exist or that is capable of supporting life
Biotic	Living or derived from living things
Carrying capacity	The maximum population size that can be supported by the available resources in a region
Community	Formed from populations of different species occupying the same geographic area
Cultivate	To prepare and use for growing crops
Ecological footprint	The amount of the earth's surface that's necessary to supply the needs of, and dispose of the waste of, a particular population.
Ecology	A branch of science that studies the interrelationships between living organisms and their environments
Ecosystem capital	The value of natural resources
Energy	The capacity to do work
Erosion	The process of soil particles being carried away by wind or water.
First law of Thermodynamics	Says that energy can neither be created nor destroyed; it can only be changed from one form to another
Fossil fuel	A hydrocarbon deposit, such as petroleum, coal, or natural gas, derived from living matter of a previous geologic time and used for fuel
Global warming	An intensification of the Greenhouse Effect due to increased presence of heat trapping gases in the atmosphere
Green Revolution	The development and introduction of new varieties (mainly) of wheat and rice that has increased yields per acre dramatically in countries since the 1960's

Greenhouse Effect	The phenomenon whereby the earth's atmosphere traps solar radiation, caused by the presence in the atmosphere of gases such as carbon dioxide, water vapor, and methane that allow incoming sunlight to pass through, but absorb heat radiated back from the earth's surface.
Habitat	The area or environment where an organism or ecological community normally lives or occurs
Half-life	The amount of time it takes for half of a radioactive sample to disappear
Heat islands	Urban areas that heat up more quickly and retain heat more than do non-urban areas
Indigenous species	Species that originate and live, or occur naturally, in an area or environment
Invasive species	An introduced, nonnative species
Kinetic energy	Energy in motion
Land degradation	When soil becomes water-logged and then dries out, and salt forms a layer on its surface
Law of Conservation of Matter	States that matter can neither be created nor destroyed
Malnutrition	Results from receiving enough food, but insufficient nutrients from the food (from an unbalanced diet)
Monoculture	When just one type of plant is planted in a large area
Natural resources	Biotic and abiotic natural ecosystems
Old growth forest	One that has never been cut; these forests have not been seriously disturbed for several hundred years
Organic compound	A compound of carbon, usually used to refer to compounds found in and formed by living things.
Population	A group of organisms of the same species that live in the same area
Potential energy	Energy at rest, or stored energy
Radiant energy	Sunlight
Salinization	The process in which soil becomes saltier and saltier until, finally, the salt prevents the growth of plants. Salinization is caused by irrigation because salts brought in with the water remain in the soil as water evaporates.
Second law of Thermodynamics	Says that entropy (disorder) of the universe is increasing; or, as energy changes forms, it becomes less and less useful as much energy is lost to the universe as heat
Species	Organisms that are capable of interbreeding with one another and incapable of breeding with other species
Sustainable	The use of a resource so that the resource is not depleted or damaged, and may continue to provide services indefinitely
Toxin	Any substance that is inhaled, or absorbed at dosages sufficient to damage a living organism
Undernourishment	Results from not getting enough food