
Metabolism

The sum total of all processes in an organism which convert energy and matter from outside sources and use that energy and matter to sustain the organism's life functions

Anabolism

The sum total of all processes in an organism which use energy and simple chemical building blocks to produce large chemicals and structures necessary for life

Catabolism

The sum total of all processes in an organism which break down chemicals to produce energy and simple chemical building blocks

Photosynthesis

The process by which green plants and some other organisms use the energy of sunlight and simple chemicals to produce their own food

Herbivores

Organisms that eat only plants

Carnivores

Organisms that eat only organisms other than plants

Omnivores

Organisms that eat both plants and other organisms

Producers

Organisms that produce their own food

Consumers

Organisms that eat living producers and/or other consumers for food

Decomposers

Organisms that break down the dead remains of other organisms

Autotrophs

Organisms that are able to make their own food

Heterotrophs

Organisms that depend on other organisms for their food

Receptors

Special structures that allow living organisms to sense the conditions of their internal or external environment

Asexual reproduction

Reproduction accomplished by a single organism

Sexual reproduction

Reproduction that requires two organisms

Inheritance

The process by which physical and biological characteristics are transmitted from the parent (or parents) to the offspring

Mutation

An abrupt and marked change in the DNA of an organism compared to that of its parents

Hypothesis

An educated guess that attempts to explain an observation or answer a question

Theory

A hypothesis that has been tested with a significant amount of data

Scientific law

A theory that has been tested by and is consistent with generations of data

Microorganisms

Living creatures that are too small to see with the naked eye

Abiogenesis

The idea that long ago, very simple life forms spontaneously appeared through chemical reactions

Prokaryotic cell

A cell that has no distinct, membrane-bounded organelles

Eukaryotic cell

A cell with distinct, membrane-bounded organelles

Species

A unit of one or more populations of individuals that can reproduce under normal conditions, produce fertile offspring, and are reproductively isolated from other such units

Taxonomy

The science of classifying organisms

Binomial nomenclature

Naming an organism with its genus
and species name
