

Chapter 4: Matter and Energy in the Web of Life

Vocabulary

organic compound

A compound formed with the element carbon

Examples: sugar, fats, cellulose

nucleus

The core of an atom that contains proton and neutron particles

proton

A particle in the center of an atom with a positive (+) charge

neutron

A particle in the center of an atom with no charge

electron

A very small particle in an atom which circles (orbits) the nucleus. It has a negative (-) charge.

ion

An electrically charged particle

synthesis

The combining of molecules

decomposition

The breaking down or splitting up of molecules

ionization

A process in which a compound becomes electrically charged

pH Scale

A scale (0-14) to indicate whether a solution is an acid or a base

catalyst

A substance that speeds up or controls a chemical reaction

energy

The ability to do work

chlorophyll

The green substance found in plants used in making food

cellular respiration

Chemical reactions in living things that release energy

ATP and ADP

Energy transfer compounds found in living things

RNA

A protein used in the making of living things

DNA

A protein which makes up the "genetic code" for every living thing

carbon cycle

The cycling of carbon through the biosphere

carbohydrate

A compound found in living things which contains carbon and stores energy

lipid

A compound containing fat which is similar to carbohydrates

protein

An organic compound that helps in chemical reactions

nucleic acid

An organic compound that contains hereditary or genetic material

cholesterol

A type of waxy fat that often attaches to animal membranes like blood vessels

amino acids

The building blocks of proteins

polypeptide

A long chain of amino acids