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