

Name \_\_\_\_\_

Period \_\_\_\_\_

### The Chemistry of Life Vocabulary

<b>Matter</b>	anything that occupies space and has mass.
<b>Mass</b>	how much matter an object has.
<b>Atom</b>	the basic unit of matter
<b>Nucleus</b>	the center of an atom, contains the protons and the neutrons
<b>Electron</b>	a negatively charged particle, located in the space surrounding the nucleus
<b>Proton</b>	a positively charged particle, located in the nucleus
<b>Neutron</b>	a neutral particle, located in the nucleus
<b>Element</b>	a pure substance that consists entirely of one type of an atom
<b>Ionic Bond</b>	a chemical bond formed when one or more electrons are <b>transferred from one atom to another</b>
<b>Covalent Bond</b>	a type of bond between atoms in which the electrons are <b>shared</b>
<b>Hydrogen Bond</b>	weak attraction between a hydrogen atom and another atom
<b>Cohesion</b>	the attraction between molecules of the same substance
<b>Adhesion</b>	the force of attraction between different kinds of molecules
<b>Heat Capacity</b>	the amount of heat energy needed to increase a substance's temperature

<b>Solution</b>	a type of mixture in which all the components are evenly distributed; Ex - saltwater
<b>Suspension</b>	a mixture of water and nondissolved material; Ex - some medicines (shake before you take or they settle out)
<b>Acid</b>	a compound that releases hydrogen ions ( $H^+$ ) in solution; a solution with a pH of less than 7
<b>Base</b>	a compound that releases hydroxide ions ( $OH^-$ ) in solution; a solution with a pH of more than 7
<b>Monomer</b>	small chemical units that make up polymers
<b>Polymer</b>	molecules composed of many monomers, make up macromolecules
<b>Carbohydrate</b>	a compound made up of carbon, hydrogen, and oxygen atoms, a type of nutrient that is the main source of energy for the body (examples monosaccharides, and disaccharides)
<b>Complex Carbohydrate</b>	large macromolecules formed when simple sugars join together
<b>Lipids</b>	macromolecules that generally do not dissolve in water and are made mostly of carbon and hydrogen atoms (ex. Fats, oils, and waxes)
<b>Saturated Fat</b>	the fatty acid has as many hydrogen atoms it can have
<b>Unsaturated Fat</b>	when there is at least one carbon-carbon double bond in a fatty acid, these are liquids at room temperature
<b>Nucleic Acid</b>	a macromolecule containing hydrogen, oxygen, nitrogen, carbon, and phosphorus.

<b>DNA</b>	deoxyribonucleic acid
<b>RNA</b>	ribonucleic acid
<b>Protein</b>	macromolecules that contain carbon, hydrogen, oxygen, and nitrogen, needed by the body for growth and repair
<b>Amino Acid</b>	a compound with an amino group on one end and a carboxyl group on the other end (these are the molecules that make up proteins)
<b>Chemical reaction</b>	when one or more substances change to produce one or more different substances.
<b>Reactants</b>	substances that enter chemical reactions
<b>Products</b>	substances produced by chemical reactions
<b>Metabolism</b>	describes all of the chemical reactions that occur in an organism.
<b>Activation energy</b>	the amount of energy needed to start a reaction.
<b>Catalyst</b>	reduces the amount of activation energy that is needed for a reaction to take place.
<b>Enzyme</b>	a protein that speeds up reactions without being permanently changed or destroyed.