**Getting Content-Specific with Vocabulary!**

April 20, 2016

**Science Words for Practice**

**Polymer** A long molecule consisting of many similar or identical building blocks linked by covalent bonds.

**Monomer** The repeating units that serve as the building blocks of a polymer.

**Enzyme** Specialized macromolecules that speed up chemical reactions.

**Dehydration Reaction** A reaction in which two molecules are covalently bonded to each other, with the loss of a water molecule.

**Hydrolysis** A process that breaks two molecules apart with the addition of a water molecule.

**Carbohydrates** A sugar.

**Monosaccharide** A carbohydrate, generally with the molecular formulas that are some multiple of the unit CH2O.

**Disaccharide** A carbohydrate that consists of two monosaccharides joined together.

**Polysaccharide** Polymers with a few hundred to a few thousand monosaccharides joined together by glycosidic linkages.

**Starch** A polysaccharide of glucose that plants store.

**Cellulose** A polysaccharide that is a major component of the tough cell walls that enclose plant cells.

**Trans Fat** An unsaturated fat, formed artificially during hydrogenation of oils, containing one or more trans double bonds.

**Phospholipid** A lipid made up of a glyerol joined to two fatty acids and a phosphate group; has two hydrophobic tails and a polar, hydrophilic head

**Steroid** A lipid characterized by a carbon skeleton consisting of four fused rings.

**Cholesterol** A steroid that forms an essential component of animal cell membranes and acts as a precursor molecule for the synthesis of other biologically important steroids.

**Catalyst** Chemical agents that selectively speed up chemical reactions without being consumed by the reaction.

**Protein** A biologically functional molecule made up of one or more polypeptides, each folded and coiled into a specific three-dimensional structure.

**Fibrous proteins** Proteins shaped like long fibers.

### Hydrophobic interaction A type of weak chemical bond formed when molecules that do not mix with water coalesce to exclude the water

### Sickle-cell disease An inherited blood disorder, caused by the substitution of one amino acid for the normal one at a particular position in the primary structure of hemoglobin.

### Gene A discrete unit of hereditary information consisting of a specific nucleotide sequence in DNA (or RNA, in some viruses).

### Nucleic acid Polymers made of monomers called nucleotides.

### Deoxyribonucleic acid (DNA) nucleic acid that contains the sugar deoxyribose

### Ribonucleic acid (RNA) single-stranded nucleic acid that contains the sugar ribose

### Ribose The sugar found in RNA.

### Double helix Two polynucleotides of DNA wound around an imaginary axis.

\*Vocabulary from Chapter 5: *The Structure and Function of Large Biological Molecules*

Reece, J.B., Urry, L.A., Cain, M.L., Wasserman, S.A, Minorsky, P.V., &  Jackson, R.B. (2013). *Campbell Biology (10th Edition).* Pearson.