

Study Outline

Biology/Honors Biology Unit 2

I. Introduction

- A. Lab safety
- B. Scientific Method
 - 1. Steps
 - 2. Control
 - 3. Independent variable
 - 4. Dependent variable
 - 5. Constants

* II. Biochemistry

- 1. Organic molecules (Biomolecules), function, monomers (subunits), examples
- 2. Carbohydrates
 - a. Energy storage, and support
 - b. Monosaccharides
 - c. Glucose, cellulose, glycogen, starch
- 3. Lipids
 - a. Storage, insulation, protective coverings
 - b. Fatty acids and glycerol
 - c. Fats, oils, waxes, steroids, cholesterol
- 4. Nucleic acids
 - a. Store and transmit genetic information
 - b. Nucleotides

c. DNA, RNA

5. Proteins

- a. Structure, speed chemical reactions, fight disease, send chemical messages
- b. Amino acids
- c. Peptide bonds
- d. Insulin, hemoglobin

6. Enzymes

- a. Activation energy
- b. Substrate
- c. Products
- d. Active site
- e. Enzyme-substrate complex
- f. pH and temperature effects