

Test 1 Outline

(Chapter's 1-3, see Homework Website for sections covered)

Water

Types of bonds that make up water / Type of molecule

The four properties of water

Organic compounds

The six chemical groups

Hydrocarbons

Isomers

Hydrophilic vs. Hydrophobic

Macromolecules

Polymers

Monomers

Dehydration/Condensation

Hydrolysis

Enzymes

Carbohydrates

General Structure

- Aldose vs. Ketose/ Carbonyl Group

Monosaccharides

Disaccharides

Polysaccharides

Examples of each

Lipids

General Structure

- Fatty Acids and Glycerol / Carboxyl Group

Triglycerides

- Unsaturated, Saturated, and Trans Fats
- Hydrogenated Lipids

Phospholipids

Steroids and Cholesterol

Proteins

General Structure

- Amino Acids, Peptides, Polypeptides
- Amino and Carboxyl Groups, Central C, H, and R group

4 Levels of Proteins Structure

- Primary, Secondary, Tertiary, Quaternary

Enzymes, Catalysts

- Activation Energy, Substrate, Effects of Temperature and pH

Nucleic Acids

DNA vs. RNA

General Structure

- Nucleotides (Sugar, Phosphate, and Base)
- Base Pairs

Levels of Organization (in Order)

7 Characteristics of Life

Evolution, Natural Selection