Nucleic Acids

Monomers:

The monomer is _____ _____. Nucleic acids are made up of a _____, a _____ and a _____.

Draw the basic structure of a nucleic acid monomer (textbook page 55):

Polymer:

Draw the basic structure for the polymers:

RNA	DNA
Ribonucleic Acid	Deoxyribonucleic Acid

Review:

1. What elements are found in nucleic acids?

2. What is the purpose/function of nucleic acids in organisms?

3. Where in the body do nucleic acids get digested? (textbook pages 932-934)

Biologist: _____

Date: _____ Period: _____

Macromolecules of Life

1. Why are macromolecules important to all organisms?

2. How do polymers form?

3. How do polymers break apart?

4. Why do we need them to form and break apart to stay alive?

Carbohydrates

Monomers:
Carbohydrates are made of _____.

Draw the main monosaccharide (glucose - textbook page 53):

What is the ratio of C:H:O in carbohydrates?

What does that ratio mean?

Polymers:
The name of the protein's polymer is _____ .

Draw the polymer below (textbook page 57):

Review:

1. What elements are found in proteins?
2. What is the purpose/function of proteins in organisms?
3. Where in the body do proteins get digested? (textbook pages 932-934)

Proteins

Monomer: Proteins are made of _____.

Draw a generic structure of a protein monomer (textbook page 55):

Draw the specific structures of the following monomers. Label the amino group, R-group, and carboxylic acid group. (Textbook page 55/56)

Alanine

Serine

Tyrosine

Polymers:
The name of carbohydrate's polymer is _____.

Draw the polymer (ex: starch - textbook page 53):

Review:

1. What elements are in carbohydrates?

2. What is the purpose/function of carbohydrates in organisms?

3. Where in the body do carbohydrates get digested? (textbook pages 932-934)

Lipids

Monomers: Common lipids are composed of two parts -- _____ and _____.

Draw and label the 2 components of a common lipid: (textbook page 54)

Glycerol: Fatty Acid:

Give an example of each type of lipid: (read on textbook page 55)

Saturated: Unsaturated:

Polyunsaturated: Phospholipid: (pg. 268 - cell membrane)

Polymers: - Lipids do not form polymers in the same way as carbohydrates, proteins, and nucleic acids do. The largest lipid molecules are triglycerides.

Draw a triglyceride:

Review:

1. What elements are found in lipids?

2. What are the functions of a lipid in an organism?

3. Where in the body do lipids get digested? (textbook pages 932-934)