





Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

### Biology Homework 1-2.2 Biomolecules

Use your **journal** as a reference tool in addition to the information provided below. Circle your answer choices and provide justifications for your answers.

<b>Biomolecules Information Chart</b>			
<b>Bio-</b> referring to life or living things. <b>Molecule-</b> the smallest particle of a substance composed of one or more atoms.			
<b>Biomolecules</b>	<b>Function</b>	<b>Monomer</b> (Building Block)	<b>Examples</b>
<b>Carbohydrate</b>	Living things use carbohydrates as the <b>main source of energy</b> .	Monosaccharide (Simple Sugar)	Sugar, Starch, Glucose 
<b>Protein</b>	Proteins control the <b>rate of chemical reactions</b> and regulate cell processes. Transport substances into and out of the cell. Form the functional parts of living things.	Amino Acid	Enzymes, Muscle 
<b>Lipid</b>	Lipids are an important part of the <b>cell's membrane</b> . Lipids can be used as a method to <b>store energy</b> for long periods of time.	Glycerol and Fatty Acid Chains	Fat, Wax, Oil 
<b>Nucleic Acid</b>	Nucleic acids store and transmit hereditary or <b>genetic information</b> necessary for making all proteins.	Nucleotides	DNA, RNA 

- Like complex carbohydrates, proteins are biomolecules that serve many functions and can be chemically broken down and restructured. Proteins and complex carbohydrates are-
  - polymers of smaller subunits
  - sequence of sugars
  - lipids of large molecules
  - nucleotides of DNA
  
- An enzyme speeds up a chemical reaction. What kind of polymer is an enzyme?
  - carbohydrate
  - lipid
  - protein
  - nucleic acid
  
- What are the functions of triglycerides in living organisms?
  - store energy
  - store genetic material
  - primary source of energy
  - speed up chemical reactions

4. A nucleotide consist of -
- a. a sugar
  - b. a nitrogenous base
  - c. a phosphate
  - d. all of these above

5. Match each term with the appropriate definition.

- |                  |  |
|------------------|--|
| _____ Amino acid | a. monomer of proteins   |
| _____ Polymer    | b. also considered subunits, building blocks, or small molecules |
| _____ Monomer    | c. large molecule made of many smaller molecules                 |