1. The shape of a protein molecule is influenced by
   (1) whether it is organic or inorganic
   (2) the sequence of amino acids in it
   (3) the number of genes found in the nucleus
   (4) the number of chromosomes in the cell

2. Hemoglobin, insulin, albumin, and maltase, which are composed of chains of amino acids, are examples of
   (1) proteins (3) lipids
   (2) carbohydrates (4) nucleic acids

3. An element found in all proteins but not found in carbohydrates and lipids is
   (1) carbon (3) oxygen
   (2) hydrogen (4) nitrogen

4. Proteins ingested by animals are immediate sources of
   (1) glucose (3) fatty acids
   (2) cellulose (4) amino acids

5. The bond that joins two amino acids together is known as
   (1) a double bond
   (2) a hydrogen bond
   (3) an ionic bond
   (4) a peptide bond

6. Which organic compound is produced when three fatty acid molecules bond to one glycerol molecule?
   (1) glycogen (3) PGAL
   (2) ATP (4) a lipid

7. Animals commonly store energy in the form of
   (1) fat and glycogen
   (2) waxes and oils
   (3) minerals and urea
   (4) water and carbon dioxide

8. In living organisms, lipids function mainly as
   (1) sources of stored energy and transmitters of genetic information
   (2) sources of stored energy and components of cellular membranes
   (3) transmitters of genetic information and catalysts of chemical reactions
   (4) catalysts of chemical reactions and components of cellular membranes

9. Which compound is a polysaccharide?
   (1) glucose (3) ribose
   (2) maltase (4) starch

10. Two examples of carbohydrates are
    (1) fatty acids and glycerol
    (2) fats and waxes
    (3) sugars and starches
    (4) amino acids and alcohol

Homework # 1.11

Name:_____ **Period:**_____
Date:_____ **Living Environment**

ENZYMES

1. The material acted upon by an enzyme is the _____.
2. Because an enzyme operates in only one kind of chemical reaction, enzymes are said to be _____.
3. Enzymes are made of _____.
4. Part of the enzyme where the substrate attaches is the _____ _____.
5. The chemical that an enzyme works on is the _____.
6. One model of how enzymes operate is called the _____.
7. The specificity of enzyme action is explained by the _____ concept.

Draw a diagram that would explain the ***enzyme-substrate*** complex. Label the *enzyme*, *substrate* and the *active site*. (3 points)