Name:		Class/Section: 10	Date:
Unit: 1- The Nature of Life	**Chapter:** 2 –The Chemistry of Life	**Lesson:** 2.3 Carbon Compounds (reference to 2.1)	**Textbook p.:** 40-49
HUBS		**Classwork**	

1. Why is it important to form chemical compounds? **Select the correct answer.**

   a. Elements form chemical compounds to become more stable

   b. Elements form chemical compounds to become less stable

   c. Elements don't ever form chemical compounds

   d. All of the above

   e. None of the above

2. Why can carbon form so many different structures? **Select all that apply.**

   It has 4 valence electrons

   It can form bonds with so many elements

   It can bond to itself and other compounds to form rings, chains and branched rings

   It is the most stable element in the world

Analysis: **Place a tick next to the correct answer(s).**

3. Lamar had a substance whose monomer was composed of an amino group, carboxyl group, and a variable *r* region. What macromolecule was Lamar looking at?

   carbohydrate lipid nucleic acid protein

4. Ahmed had a peperoni pizza. Which macromolecule groups did he consume?

   carbohydrate lipid nucleic acid protein

Fill in the blanks by selecting the correct answer.

5. Ionic bonds _____ electrons while covalent bonds _____ electrons.

6. Macromolecules are formed when _____ join to make a _____

7. The process of forming macromolecules is called _____

8. Answer the following questions in the space below by stating the correct macromolecule.

   a. Fats, oils, waxes do not dissolve in water and are kinds of macromolecules called _____.

   b. _____store genetic information.

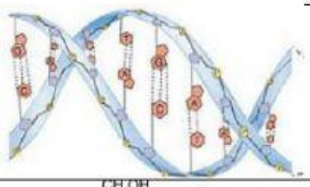
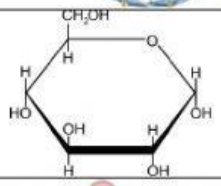
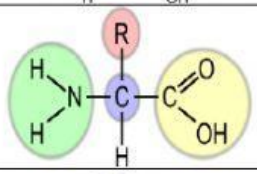
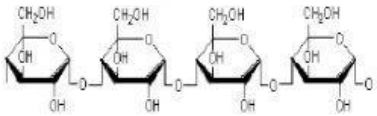
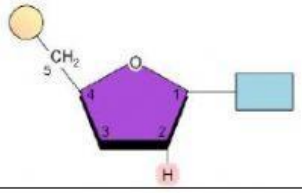
   c. Compounds made up of carbon, hydrogen and oxygen that are the main source of energy for the body are called _____

9. Complete the chart:

Four types of Macromolecules	Monomer	Chemical Make-up	Function
	Glycerol & Fatty Acid (Glyceride)		
		C, H, O, N, P	
			Fight diseases, control cell's reaction
Carbohydrates			

10. Complete the table by shading in the correct column for each description. (Tick only one box per row)

Description	Lipids	Nucleic Acids	Proteins	Carbo-hydrates
Contain peptide bonds				
DNA and RNA are examples				
Follow the general formula (CH_2O) (1:2:1 Ratio)				
Form skin, blood, hair, muscles				
Table sugar and starch are examples				
Most consist of 3 fatty acids bonded to a glycerol				
Used for long-term energy storage				
Include starch				
Cannot be consumed, only inherited.				

11. Name all the images below with the correct term.

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