

Name _____

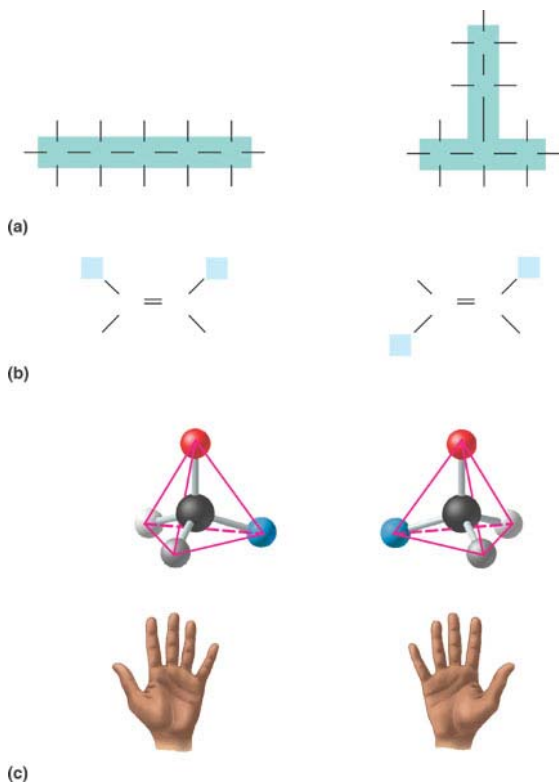
AP Biology

TEXT: *Biology*, Campbell and Reece

7th Edition

Chapter 4 – Carbon and the Molecular Diversity of Life
Guided Reading

1. Why is organic chemistry so important in the study of biology?
2. Explain the importance of the Urey-Miller experiment and its impact in the scientific community?
3. What unique properties of carbon make it the central atom in the *chemistry of life*?
4. Use the diagram below to label then compare and contrast the three types of isomers.



5. Create a table below. After each functional group draw the structure, name the compound, write an example and note the functional properties. *Now, doesn't this look like great quiz material?*

Functional Group	Drawing of the structure	Compound Name	Example	Functional Properties
Hydroxyl				
Carbonyl				

Carboxyl				
Amino				
Sulfhydryl				
Phosphate				

AP Biology Exam Checkpoint

6. An organic compound that is composed of carbon, hydrogen, and oxygen in a 1:2:1 ratio is known as a
- a. lipid
 - b. carbohydrate
 - c. salt
 - d. nucleic acid
 - e. protein