

CHAPTER 3.1: Carbon Chemistry

1. Define organic chemistry.

2. What are the four major classes of organic compounds studied in biology?

3. Describe some of the shapes of carbon skeletons.

4. Define the following:

a. Isomers _ _____

b. Geometric isotopes _____

c. Optical Isomers (Enantiomers) _____

5. Why are optical isomers of biological interest?

Name: _____

6. What is the significance of functional groups?

7. For each of the functional groups, complete the chart:

Group	Structural Formula	Comments
hydroxyl		
carbonyl—aldehyde		
carbonyl—ketone		
carboxyl		
amino		
sulfhydryl		
phosphate		

8. Describe how organic polymers are put together and broken apart.
