

Chapter
6
The Chemistry of Life, continued
Reinforcement and Study Guide
Section 6.3 Life Substances

In your textbook, read about the role of carbon in organisms.

For each of the following statements about carbon, write true or false.

- _____ 1. Carbon atoms can bond together in straight chains, branched chains, or rings.
- _____ 2. Large molecules containing carbon atoms are called micromolecules.
- _____ 3. Polymers are formed by hydrolysis.
- _____ 4. Cells use carbohydrates for energy.

Write each item below under the correct heading.

sucrose glucose starch $C_6H_{12}O_6$
 cellulose glycogen fructose $C_{12}H_{22}O_{11}$

Monosaccharide
5.
6.
7.

Dissaccharide
8.
9.

Polysaccharide
10.
11.
12.

Complete the table by checking the correct column for each description.

Description	Lipids	Proteins	Nucleic Acids
13. Made up of nucleotides			
14. Most consist of three fatty acids bonded to a glycerol molecule			
15. DNA and RNA			
16. Contain peptide bonds			
17. Produce proteins			
18. Commonly called fats and oils			
19. Made up of amino acids			
20. Used for long-term energy storage, insulation, and protective coatings			
21. Contain carbon, hydrogen, oxygen, and nitrogen			