

Skills Worksheet

# Directed Reading

## Section: Chemistry of Cells

Complete each statement by writing the correct term or phrase in the space provided.

1. The carbon atoms in organic molecules are bonded to other atoms by \_\_\_\_\_ bonds.
2. The four major classes of organic compounds are \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , and nucleic acids.
3. The building blocks of carbohydrates are \_\_\_\_\_ .
4. If a carbohydrate molecule contained six carbon atoms, it would also contain \_\_\_\_\_ hydrogen atoms.
5. Humans cannot digest the carbohydrate \_\_\_\_\_ .
6. Fats are lipids that store \_\_\_\_\_ .

Complete each statement by underlining the correct term or phrase in the brackets.

7. Lipids will dissolve in [water / oil].
8. Fats are composed of three fatty acid molecules joined to a molecule of [glycerol / protein].
9. At room temperature, [saturated / unsaturated] fats are usually liquids.
10. A protein is a chain of linked smaller molecules called [amino acids / lipids].

Read each question, and write your answer in the space provided.

11. What two factors determine the shape of a protein?

\_\_\_\_\_

\_\_\_\_\_

12. What roles do proteins play in organisms?

\_\_\_\_\_

\_\_\_\_\_

**Directed Reading** *continued*

**In the space provided, write the letter of the description that best matches the term or phrase.**

\_\_\_\_\_ **13.** nucleic acid

\_\_\_\_\_ **14.** nucleotide

\_\_\_\_\_ **15.** DNA

\_\_\_\_\_ **16.** RNA

\_\_\_\_\_ **17.** ATP

**a.** temporarily stores energy

**b.** involved in the production of proteins

**c.** subunit of DNA and RNA

**d.** one of the major classes of organic compounds

**e.** stores hereditary information