

**Chapter 6 Chemistry of Living Systems (Life Sciences)****Standards Practice**

In this molecule, the two carbon atoms share

- A 1 electron.
- B 3 electrons.
- C 4 electrons.
- D 6 electrons.

**2** How many double bonds does a molecule of carbon dioxide ( $\text{CO}_2$ ) have?

- A 1
- B 2
- C 3
- D 4

**3** An alcohol is a substituted hydrocarbon that contains one or more

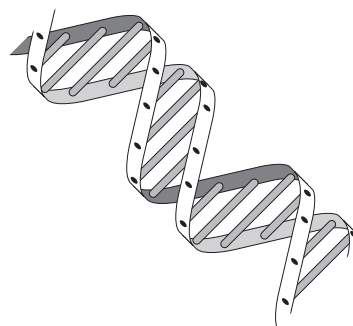
- A halogen atoms.
- B amino groups.
- C hydroxyl groups.
- D carboxyl groups.

**4** An organic compound is a compound that contains the element

- A sodium.
- B calcium.
- C hydrogen.
- D carbon.

**5** Why do living organisms need water to survive?

- A Many of the chemical reactions in living organisms take place in water.
- B Water is an important source of energy.
- C Water serves as a helper molecule in a variety of chemical reactions.
- D Many large organic molecules are polymers made up of water molecules.

**6**

The diagram represents an organic molecule that determines the differences among living organisms. The molecule is a

- A nucleic acid.
- B lipid.
- C protein.
- D carbohydrate.