

Skills Worksheet

Directed Reading B**Section: Covalent and Metallic Bonds** (pp. 236–241)**COVALENT BONDS**

- _____ 1. What is formed when atoms share one or more pairs of electrons?
- a. a covalent bond
 - b. a covalent compound
 - c. an ionic bond
 - d. an electric bond
- _____ 2. What usually consists of two or more atoms joined in a definite ratio?
- a. a bond
 - b. a valence electron
 - c. an atom
 - d. a molecule
3. A model that shows only the valence electrons in an atom is a(n)

_____.

COVALENT COMPOUNDS AND MOLECULES

4. What is the smallest particle into which a covalently bonded compound can be divided?
- _____
5. What is the relationship between diatomic molecules and diatomic elements? Name one example of a diatomic element.
- _____
- _____
- _____
6. Name two examples of substances that contain complex molecules.
- _____
- _____

METALLIC BONDS

7. A bond formed by the attraction between positively charged metal ions and the electrons in the metal is a(n) _____.

Directed Reading B *continued*

8. What allows valence electrons in metals to move throughout the metal?

PROPERTIES OF METALS

9. Give an example of how metallic bonding allows metals to conduct electric current.

10. The property of _____ means that a metal can be drawn into wires.

11. The property of _____ means that a metal can be hammered into sheets.

12. Why doesn't a piece of metal break when it is bent?
