Name _____ Class _____ Date _____

Skills Worksheet

Directed Reading A

Section: Covalent and Metallic Bonds

COVALENT BONDS

_____ **1.** What is formed when atoms share one or more pairs of electrons?

a. covalent bond
b. covalent compound
c. ionic bond
d. electric bond

_____ **2.** What usually consists of two or more atoms joined in a definite ratio?

a. bond
b. valence electron
c. atom
d. molecule

3. A model that shows only the valence electrons in an atom is a(n) _____.

COVALENT COMPOUNDS AND MOLECULES

4. What is the relationship between diatomic molecules and diatomic elements? Name one example of a diatomic element.

_____

_____

_____

_____

5. What is the smallest particle into which covalent bonds can be divided?

_____

6. Name two examples of 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) _____.

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

_____

_____

_____

PROPERTIES OF METALS

_____ **9.** What property gives metals the ability to be drawn into wires?

a. malleability
b. conductivity
c. ductility
d. electricity

10. The property of _____ means that the metal can be hammered into sheets.

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

_____

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_____

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

_____

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