

## Covalent Bonding

### Multiple Choice

Identify the choice that best completes the statement or answers the question.

- \_\_\_\_\_ 1. When two hydrogen atoms bond, the positive nucleus of one atom attracts the  
a. negative nucleus of the other atom.  
b. positive electron of the other atom.  
c. negative electron of the other atom.  
d. positive nucleus of the other atom.
- \_\_\_\_\_ 2. In which type of bond do atoms share electrons?  
a. covalent bonds  
b. metallic bonds  
c. ionic bonds  
d. polyatomic bonds
- \_\_\_\_\_ 3. The attraction between molecules tends to be \_\_\_\_\_ the attraction between ions.  
a. weaker than  
b. stronger than  
c. equal to  
d. None of the above
- \_\_\_\_\_ 4. A covalent compound made of one sulfur and two oxygen atoms would be named  
a. sulfur dioxide.  
b. sulfur oxide.  
c. disulfur oxide.  
d. sulfide oxygen.
- \_\_\_\_\_ 5. The covalent compound  $\text{N}_2\text{O}_5$  would be named  
a. nitrogen oxide.  
b. dinitrogen oxide.  
c. nitrogen pentoxide.  
d. dinitrogen pentoxide.
- \_\_\_\_\_ 6. All organic compounds *must* contain the element  
a. oxygen.  
b. hydrogen.  
c. nitrogen.  
d. carbon.
- \_\_\_\_\_ 7. The atoms in organic molecules are held together by \_\_\_\_\_ bonds.  
a. hydrogen  
b. covalent  
c. ionic  
d. metallic
- \_\_\_\_\_ 8. Covalent bonds are formed between  
a. ions.  
b. metal atoms.  
c. nonmetal atoms.  
d. compounds.

### Completion

Complete each statement.

9. Most covalent compounds have relatively \_\_\_\_\_ melting points.
10. A compound whose molecules contain one boron atom and three fluorine atoms would be named \_\_\_\_\_.