

Name \_\_\_\_\_ Period \_\_\_\_ Date \_\_\_\_

Molecular and Ionic Compounds  
Practice Worksheet

1. Name the following molecular compounds

- |                                 |                               |
|---------------------------------|-------------------------------|
| a. $\text{PCl}_2$ _____         | f. $\text{SiO}_2$ _____       |
| b. $\text{CCl}_4$ _____         | g. $\text{CO}$ _____          |
| c. $\text{NO}_2$ _____          | h. $\text{CO}_2$ _____        |
| d. $\text{N}_2\text{F}_2$ _____ | i. $\text{H}_2\text{O}$ _____ |
| e. $\text{P}_4\text{O}_6$ _____ | j. $\text{Cl}_2$ _____        |

2. Write formulas for the following molecular compounds

- |                              |                                   |
|------------------------------|-----------------------------------|
| a. Water _____               | f. Sulfur dioxide _____           |
| b. Carbon dioxide _____      | g. Sulfur hexafluoride _____      |
| c. Silicon dioxide _____     | h. Nitrogen tribromide _____      |
| d. Dichlorine monoxide _____ | i. Dinitrogen tetrafluoride _____ |
| e. Nitrogen dioxide _____    | j. Diphosphorus pentoxide _____   |

3. Write the formulas for the following acids

- |                            |                          |
|----------------------------|--------------------------|
| a. Acetic acid _____       | d. Phosphoric acid _____ |
| b. Hydrochloric acid _____ | e. Carbonic acid _____   |
| c. Sulfuric acid _____     | f. Nitric acid _____     |

4. Name the following ionic compounds

- |                                   |                               |
|-----------------------------------|-------------------------------|
| a. $\text{KBr}$ _____             | e. $\text{CuI}$ _____         |
| b. $\text{FeCl}_3$ _____          | f. $\text{K}_2\text{S}$ _____ |
| c. $\text{NiCl}_2$ _____          | g. $\text{CaCO}_3$ _____      |
| d. $\text{Na}_3\text{PO}_4$ _____ | h. $\text{LiNO}_3$ _____      |

5. Name and indicate whether the compounds are ionic or molecular

- |                                       |
|---------------------------------------|
| a. $\text{SeF}_4$ _____               |
| b. $\text{KBr}$ _____                 |
| c. $\text{H}_2$ _____                 |
| d. $\text{CO}_2$ _____                |
| e. $\text{H}_2\text{CO}_3$ _____      |
| f. $\text{Cu}(\text{OH})_2$ _____     |
| g. $\text{NaHSO}_4$ _____             |
| h. $(\text{NH}_4)_2\text{SO}_4$ _____ |