

- Write formulas for the following ionic compounds.
 

a. sodium phosphate	c. sodium hydroxide	e. ammonium chloride
b. magnesium sulfate	d. potassium cyanide	f. potassium dichromate
- Write formulas for compounds formed from these pairs of ions.
 

a. $\text{NH}_4^+$ , $\text{SO}_4^{2-}$	c. barium ion and hydroxide ion
b. $\text{K}^+$ , $\text{NO}_3^-$	d. lithium ion and carbonate ion
- Name the following compounds.
 

a. NaCN	c. $\text{Na}_2\text{SO}_4$	e. $\text{Cu}(\text{OH})_2$
b. $\text{FeCl}_3$	d. $\text{K}_2\text{CO}_3$	f. $\text{LiNO}_3$
- Name and give the charge of the metal cation in each of the following ionic compounds.
 

a. $\text{Na}_3\text{PO}_4$	c. CaS	e. $\text{FeCl}_3$
b. $\text{NiCl}_2$	d. $\text{K}_2\text{S}$	f. CuI

### SECTION 9.3 NAMING AND WRITING FORMULAS FOR MOLECULAR COMPOUNDS

- Name the following molecular compounds.
 

a. $\text{PCl}_5$	c. $\text{NO}_2$	e. $\text{P}_4\text{O}_6$	g. $\text{SiO}_2$
b. $\text{CCl}_4$	d. $\text{N}_2\text{F}_2$	f. $\text{XeF}_2$	h. $\text{Cl}_2\text{O}_7$
- Write the formulas for the following binary molecular compounds.
 

a. nitrogen tribromide	c. sulfur dioxide
b. dichlorine monoxide	d. dinitrogen tetrafluoride

### SECTION 9.4 NAMING AND WRITING FORMULAS FOR ACIDS AND BASES

- Name the following compounds as acids.
 

a. $\text{HNO}_2$	b. $\text{H}_2\text{SO}_4$	c. HF	d. $\text{H}_2\text{CO}_3$
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- Write the formulas for the following bases.
 

a. calcium hydroxide	c. aluminum hydroxide
b. ammonium hydroxide	d. lithium hydroxide

### SECTION 9.5 THE LAWS GOVERNING FORMULAS AND NAMES

- Write the formulas for these compounds.
 

a. potassium sulfide	e. hydrobromic acid	i. sulfur hexafluoride
b. tin(IV) chloride	f. aluminum fluoride	j. magnesium chloride
c. hydrosulfuric acid	g. dinitrogen pentoxide	k. phosphoric acid
d. calcium oxide	h. iron(III) carbonate	l. nitric acid