CHAPTER REVIEW PROBLEMS

Write the formula for each of the following compounds.

1. a. sodium nitrite
b. sodium carbonate
c. sodium sulfate
d. potassium hydroxide
e. potassium nitrate
f. potassium sulfite
g. potassium phosphate
h. cadmium oxalate
i. cadmium carbonate
j. cadmium sulfate
k. cadmium phosphate
l. aluminum bromide
m. aluminum nitrate
n. aluminum sulfide

2. a. magnesium nitrate
b. magnesium sulfate
c. magnesium carbonate
d. barium bromide
e. barium nitrate
f. barium sulfate
g. iron(II) oxide
h. iron(II) hydroxide
i. iron(II) carbonate
j. iron(II) sulfate
k. iron(III) phosphate
l. iron(III) bromide

3. a. strontium chloride
b. strontium hydroxide
c. strontium nitrate
d. strontium sulfite
e. strontium sulfide
f. iron(III) sulfate
g. iron(III) phosphate
h. mercury(II) bromide
i. mercury(II) carbonate
j. mercury(II) sulfide

Write the name for each of the following compounds.

4. a. $NaNO_3$
b. Na_2SO_3
c. Na_3PO_4
d. KNO_2
e. K_2CO_3
f. K_2SO_4
g. $CdBr_2$
h. $Cd(NO_3)_2$
i. $CdSO_3$
j. CdS
k. $AlCl_3$
l. $Al(OH)_3$

5. a. $Mg(NO_2)_2$
b. $MgSO_3$
c. $Mg_3(PO_4)_2$
d. $Ba(NO_2)_2$
e. $BaSO_3$
f. $BaCO_3$
g. $Al_2(SO_4)_3$
h. $AlPO_4$
i. $FeBr_2$
j. $Fe(NO_3)_2$
k. $FeSO_3$
l. FeS

6. a. $Ba_3(PO_4)_2$
b. $SrBr_2$
c. $Sr(NO_3)_2$
d. $SrCO_3$
e. $SrSO_4$
f. $Sr_3(PO_4)_2$
g. $FeCl_3$
h. $Fe(NO_3)_3$
i. Fe_2S_3
j. $HgCl_2$
k. $Hg(NO_3)_2$
l. $HgSO_4$

7. Write the formula for each of the following compounds.

a. sodium hydroxide
b. mercury(II) sulfate
c. calcium hypochlorite
d. lead(II) phosphate
e. aluminum chlorate
f. ammonium sulfide
g. copper(I) carbonate
h. mercury(I) sulfide
i. lead(II) acetate
j. manganese(IV) oxide
k. manganese(II) sulfate
l. silver oxide
m. zinc nitrate
n. chromium(III) sulfite
o. ammonium dichromate
p. iron(III) oxide

8. Write the names for each of the following compounds.

a. $NaCH_3COO$
b. $Ni(NO_3)_2$
c. Hg_2Cl_2
d. $Sn_3(PO_4)_2$
e. $Cr(OH)_2$
f. $Zn(ClO_3)_2$
g. $MgBr_2$
h. CuN_3
i. CaH_2
j. $Ba(NO_2)_2$
k. MnS
l. $Sn(NO_3)_4$
m. $(NH_4)_2SO_4$
n. PbO
o. KCN

9. Write the formula for each of the following compounds.

a. magnesium nitrate
b. silver acetate
c. barium perchlorate
d. potassium nitrite
e. ammonium sulfate
f. ammonium dichromate
g. barium molybdate
h. zinc thiocyanate

10. Write the name for each of the following compounds.

a. $FeSO_4$
b. NH_4ClO_3
c. $Fe(CH_3COO)_2$
d. $CuCrO_4$
e. $Mg(NO_3)_2$
f. $AlPO_4$
g. Na_2SO_3
h. $Ca(ClO_2)_2$
i. $(NH_4)_2CO_3$
j. Ag_2CrO_4
k. $Ba_3(PO_4)_2$
l. $KClO_4$

11. Write the formula for each of the following compounds.

a. zinc hexafluorosilicate
b. antimony(V) sulfide
c. bismuth(III) telluride
d. titanium(IV) iodide
e. nickel(II) fluoride
f. manganese(IV) oxide
g. lead(IV) oxide
h. calcium tartrate
i. mercury(II) oxide
j. cobalt(III) oxide

12. Write the name for each of the following compounds

a. $Zn(SCN)_2$
b. Sb_2O_5
c. TiO
d. InP
e. Mn_2O_3
f. $Cr(CH_3COO)_3$

13. Write the empirical formula for each of the following.

a. C_6H_{14}
b. CO_2
c. N_2F_4
d. $C_3H_6Cl_2$
e. $C_5H_{10}O_2$
f. $P_3N_3Cl_6$

14. *Write the number of formula units expressed by each of the following.*

a. $5H_2O$
b. $9O_2$
c. $3(NH_4)_2SO_4$
d. $6NF_3$
e. $C_{12}H_{22}O_{11}$
f. $4Fe_2O_3$