

## IONIC COMPOUNDS: Names and Formulas

1. Write the formulas for the following compounds.

a. magnesium oxide \_\_\_\_\_

b. aluminum nitride \_\_\_\_\_

c. potassium sulfide \_\_\_\_\_

d. calcium bromide \_\_\_\_\_

e. aluminum sulfide \_\_\_\_\_

f. beryllium oxide \_\_\_\_\_

g. strontium phosphide \_\_\_\_\_

h. sodium fluoride \_\_\_\_\_

i. lithium nitride \_\_\_\_\_

j. barium oxide \_\_\_\_\_

k. tin (II) fluoride \_\_\_\_\_

l. lead (IV) nitride \_\_\_\_\_

m. iron (III) chloride \_\_\_\_\_

n. copper (I) oxide \_\_\_\_\_

o. gold (III) sulfide \_\_\_\_\_

p. mercury (II) oxide \_\_\_\_\_

q. tin (IV) iodide \_\_\_\_\_

r. copper (II) phosphide \_\_\_\_\_

s. cobalt (II) sulphide \_\_\_\_\_

t. tin (IV) sulphide \_\_\_\_\_

2. Write the names for the following compounds.

a.  $\text{Li}_2\text{O}$  \_\_\_\_\_

b.  $\text{AlCl}_3$  \_\_\_\_\_

c.  $\text{MgS}$  \_\_\_\_\_

d.  $\text{CaF}_2$  \_\_\_\_\_

e.  $\text{Al}_2\text{O}_3$  \_\_\_\_\_

f.  $\text{BeF}_2$  \_\_\_\_\_

g.  $\text{K}_3\text{P}$  \_\_\_\_\_

h.  $\text{Mg}_3\text{P}_2$  \_\_\_\_\_

i.  $\text{CaO}$  \_\_\_\_\_

j.  $\text{Ag}_2\text{S}$  \_\_\_\_\_

k.  $\text{PbS}$  \_\_\_\_\_

l.  $\text{SnO}_2$  \_\_\_\_\_

m.  $\text{NiO}$  \_\_\_\_\_

n.  $\text{CuI}_2$  \_\_\_\_\_

o.  $\text{PbCl}_4$  \_\_\_\_\_

p.  $\text{FeP}$  \_\_\_\_\_

q.  $\text{AuBr}_3$  \_\_\_\_\_

r.  $\text{Hg}_2\text{S}$  \_\_\_\_\_

s.  $\text{SbF}_3$  \_\_\_\_\_

t.  $\text{MnO}_2$  \_\_\_\_\_

## POLYATOMIC COMPOUNDS: Names and Formulas

3. Write the formulas for the following compounds.

a. magnesium carbonate \_\_\_\_\_

b. aluminum nitrate \_\_\_\_\_

c. potassium sulfate \_\_\_\_\_

d. calcium hydroxide \_\_\_\_\_

e. aluminum sulfate \_\_\_\_\_

f. sodium carbonate \_\_\_\_\_

g. strontium phosphate \_\_\_\_\_

h. sodium hydrogen carbonate \_\_\_\_\_

i. lithium nitrate \_\_\_\_\_

j. aluminum hydroxide \_\_\_\_\_

k. tin (II) hydrogen carbonate \_\_\_\_\_

l. lead (IV) nitrate \_\_\_\_\_

m. iron (III) carbonate \_\_\_\_\_

n. copper (II) hydroxide \_\_\_\_\_

o. lead (II) nitrate \_\_\_\_\_

p. mercury (II) hydrogen sulfate \_\_\_\_\_

q. tin (IV) phosphate \_\_\_\_\_

r. lead (IV) hydroxide \_\_\_\_\_

s. potassium nitrate \_\_\_\_\_

t. tin (IV) sulphate \_\_\_\_\_

4. Write the names for the following compounds.

a.  $\text{Li}_2\text{SO}_4$  \_\_\_\_\_

b.  $\text{Al}(\text{HCO}_3)_3$  \_\_\_\_\_

c.  $\text{MgSO}_4$  \_\_\_\_\_

d.  $\text{K}_2\text{CO}_3$  \_\_\_\_\_

e.  $\text{Na}_2\text{SO}_4$  \_\_\_\_\_

f.  $\text{AgNO}_3$  \_\_\_\_\_

g.  $\text{K}_3\text{PO}_4$  \_\_\_\_\_

h.  $\text{Sr}(\text{HSO}_4)_2$  \_\_\_\_\_

i.  $\text{RbOH}$  \_\_\_\_\_

j.  $\text{NaHCO}_3$  \_\_\_\_\_

k.  $\text{PbSO}_4$  \_\_\_\_\_

l.  $\text{AuOH}$  \_\_\_\_\_

m.  $\text{GaPO}_4$  \_\_\_\_\_

n.  $\text{Cu}(\text{NO}_3)$  \_\_\_\_\_

o.  $\text{Pb}(\text{HSO}_4)_4$  \_\_\_\_\_

p.  $\text{Fe}(\text{HCO}_3)_3$  \_\_\_\_\_

q.  $\text{Au}_2\text{CO}_3$  \_\_\_\_\_

r.  $\text{HgOH}$  \_\_\_\_\_

s.  $\text{Sb}_2(\text{SO}_4)_3$  \_\_\_\_\_

t.  $\text{MnSO}_4$  \_\_\_\_\_

## MOLECULAR COMPOUNDS: Names and Formulas

5. Write the formulas for the following compounds.

a. carbon dioxide \_\_\_\_\_

b. silicon dioxide \_\_\_\_\_

c. water \_\_\_\_\_

d. carbon disulphide \_\_\_\_\_

e. sulphur trioxide \_\_\_\_\_

f. carbon tetrachloride \_\_\_\_\_

g. sulphur dioxide \_\_\_\_\_

h. dinitrogen tetroxide \_\_\_\_\_

i. nitrogen monoxide \_\_\_\_\_

j. arsenic tribromide \_\_\_\_\_

k. diphosphorus trisulphide \_\_\_\_\_

l. dinitrogen monoxide \_\_\_\_\_

m. dichlorine monoxide \_\_\_\_\_

n. bromine gas \_\_\_\_\_

o. carbon monoxide \_\_\_\_\_

p. xenon tetrafluoride \_\_\_\_\_

q. neon gas \_\_\_\_\_

r. silicon tetrahydride \_\_\_\_\_

s. iodine heptachloride \_\_\_\_\_

t. krypton difluoride \_\_\_\_\_

6. Write the names for the following compounds.

a.  $\text{CF}_4$  \_\_\_\_\_

b.  $\text{NH}_3$  \_\_\_\_\_

c.  $\text{PBr}_3$  \_\_\_\_\_

d.  $\text{F}_2$  gas \_\_\_\_\_

e.  $\text{CS}_2$  \_\_\_\_\_

f.  $\text{CO}$  \_\_\_\_\_

g.  $\text{SiC}$  \_\_\_\_\_

h.  $\text{N}_2\text{O}_4$  \_\_\_\_\_

i.  $\text{P}_2\text{O}_5$  \_\_\_\_\_

j.  $\text{SF}_4$  \_\_\_\_\_

k.  $\text{NF}_3$  \_\_\_\_\_

l.  $\text{P}_2\text{S}_5$  \_\_\_\_\_

m.  $\text{PF}_5$  \_\_\_\_\_

n.  $\text{ICl}$  \_\_\_\_\_

o.  $\text{SeCl}_2$  \_\_\_\_\_

p.  $\text{Cl}_2\text{O}$  \_\_\_\_\_

q.  $\text{AsBr}_3$  \_\_\_\_\_

r.  $\text{H}_2\text{S}$  \_\_\_\_\_

s.  $\text{B}_2\text{H}_8$  \_\_\_\_\_

t.  $\text{TeCl}_2$  \_\_\_\_\_

## PUTTING IT ALL TOGETHER: Names and Formulas

7. Write the formulas for the following compounds.

a. calcium fluoride \_\_\_\_\_

b. carbon disulfide \_\_\_\_\_

c. nitrogen triiodide \_\_\_\_\_

d. sodium phosphide \_\_\_\_\_

e. dichlorine monoxide \_\_\_\_\_

f. iron (III) carbonate \_\_\_\_\_

g. manganese (IV) sulphate \_\_\_\_\_

h. diphosphorus pentasulphide \_\_\_\_\_

i. tin (IV) chloride \_\_\_\_\_

j. magnesium hydrogen carbonate \_\_\_\_\_

k. potassium sulphate \_\_\_\_\_

l. barium nitride \_\_\_\_\_

m. aluminum hydroxide \_\_\_\_\_

n. fluorine gas \_\_\_\_\_

o. silicon dioxide \_\_\_\_\_

p. calcium hydroxide \_\_\_\_\_

q. xenon gas \_\_\_\_\_

r. gold (I) nitrate \_\_\_\_\_

s. sulphur trioxide \_\_\_\_\_

t. iron (II) phosphate \_\_\_\_\_

8. Write the names for the following compounds.

a.  $\text{CCl}_4$  \_\_\_\_\_

b.  $\text{Mg}(\text{HSO}_4)_2$  \_\_\_\_\_

c.  $\text{PBr}_3$  \_\_\_\_\_

d.  $\text{H}_2$  gas \_\_\_\_\_

e.  $\text{PbS}_2$  \_\_\_\_\_

f.  $\text{Al}_2(\text{CO}_3)_3$  \_\_\_\_\_

g.  $\text{Na}_2\text{SO}_4$  \_\_\_\_\_

h.  $\text{Na}_2\text{O}$  \_\_\_\_\_

i.  $\text{Al}_2(\text{SO}_4)_3$  \_\_\_\_\_

j.  $\text{Li}_2\text{SO}_4$  \_\_\_\_\_

k.  $\text{NaNO}_3$  \_\_\_\_\_

l.  $\text{PCl}_5$  \_\_\_\_\_

m.  $\text{BiF}_5$  \_\_\_\_\_

n.  $\text{Al}(\text{HCO}_3)_3$  \_\_\_\_\_

o.  $\text{FeCl}_2$  \_\_\_\_\_

p.  $\text{N}_2\text{O}$  \_\_\_\_\_

q.  $\text{CuHSO}_4$  \_\_\_\_\_

r.  $\text{Li}_3\text{PO}_4$  \_\_\_\_\_

s.  $\text{SnO}$  \_\_\_\_\_

t.  $\text{SeCl}_2$  \_\_\_\_\_