

1. Name the following basic binary compounds.

a. MgBr_2 Magnesium bromide

b. AlCl_3 Aluminum chloride

c. CaS Calcium sulfide

d. Li_3N Lithium nitride

2. Write the formula for the following basic binary compounds.

a. Potassium fluoride KF

b. Barium phosphide Ba_3P_2

c. Sodium iodide NaI

d. Calcium oxide CaO

3. Name the following binary ionic compounds with polyatomic ions.

a. Li_2CO_3 Lithium carbonate

b. $(\text{NH}_4)_3\text{PO}_4$ Ammonium phosphate

c. NaNO_3 Sodium nitrate

d. $\text{Ba}_3(\text{PO}_4)_2$ Barium phosphate

4. Write the formula for the following binary ionic compounds with polyatomic ions

a. Ammonium dichromate $(\text{NH}_4)_2\text{Cr}_2\text{O}_7$

b. Magnesium hydroxide $\text{Mg}(\text{OH})_2$

c. Aluminum sulfate $\text{Al}_2(\text{SO}_4)_3$

d. Calcium phosphate $\text{Ca}_3(\text{PO}_4)_2$

5. Name the following binary stock system compounds.

a. FeCl_3 Iron (III) chloride

b. Pb_2O_4 Lead (IV) oxide

c. CuSO_4 Copper (II) sulfate

d. Cu_2SO_3 Copper (I) sulfite

6. Write the formula for the following binary stock system compounds.

a. Manganese (IV) oxide Mn_2O_4

b. Vanadium (V) carbonate $\text{V}_2(\text{CO}_3)_5$

c. Arsenic (II) sulfite As_2SO_3

d. Mercury (I) phosphate $\text{Hg}_2(\text{PO}_4)$

7. Name the following covalent compounds.

a. NO_2 Nitrogen dioxide

b. H_2O Dihydrogen monoxide

c. SF_6 Sulfur hexafluoride

d. NO Nitrogen monoxide

8. Write the formula for the following covalent compounds.

- a. Sulfur dioxide SO_2 c. Carbon tetrachloride CCl_4
b. Tetraphosphorus decoxide P_4O_{10} d. Dinitrogen pentoxide N_2O_5

9. Write the name or formula for the following various compounds.

- a. Lithium bromide LiBr
b. Magnesium nitrate $\text{Mg}(\text{NO}_3)_2$
c. Cesium carbonate Cs_2CO_3
d. Cu_3P Copper (I) phosphide
e. P_2O_5 Diphosphorus pentoxide
f. Phosphorus tribromide PBr_3
g. $(\text{NH}_4)_2\text{SO}_4$ Ammonium sulfate
h. Dichlorine monoxide Cl_2O
i. Copper (II) perchlorate $\text{Cu}(\text{ClO}_4)_2$
j. Iron (III) oxide Fe_2O_3
k. $\text{Al}_2(\text{CO}_3)_3$ Aluminum carbonate
l. CrPO_4 Chromium (III) phosphate
m. Tetranitrogen pentafluoride N_4F_5
n. NaCl Sodium chloride
o. $\text{Cu}(\text{C}_2\text{H}_3\text{O}_2)_2$ Copper (II) acetate