

# Practice – Mixed Compounds

Solve the following.

Key  
10-11  
chem

**Part I:** Write a correct name for each of the following ionic or molecular compounds.

1.  $\text{SCl}_4$  sulfur tetrachloride
2.  $\text{P}_4\text{O}_{10}$  tetraphosphorus decoxide
3.  $\text{H}_2\text{S}$  hydrosulfuric acid
4.  $\text{Fe}_2\text{O}_3$  ferric/iron (III) oxide
5.  $\text{Br}_2$  bromine
6.  $\text{HClO}_3$  chloric acid
7.  $\text{N}_2\text{O}_3$  dinitrogen trioxide
8.  $\text{NaBr}$  sodium bromide
9.  $\text{SO}_2$  sulfur dioxide
10.  $\text{H}_3\text{PO}_4$  phosphoric acid
11.  $\text{Ca}_3(\text{PO}_4)_2$  calcium phosphate
12.  $\text{MgCO}_3$  magnesium carbonate
13.  $\text{N}_2\text{S}_3$  dinitrogen trisulfide
14.  $\text{HNO}_3$  nitric acid
15.  $\text{SnI}_4$  tin(IV)/stannic iodide
16.  $\text{S}_2\text{Cl}_4$  disulfur tetrachloride
17.  $\text{NH}_4^+$  ammonium
18.  $\text{FeSO}_4$  iron(II)/ferrous sulfate
19.  $\text{OF}_2$  oxygen difluoride
20.  $\text{HClO}_4$  perchloric acid
21.  $\text{HCl}$  hydrochloric acid
22.  $\text{NCl}_3$  nitrogen trichloride
23.  $\text{I}_2$  iodine
24.  $\text{KMnO}_4$  potassium permanganate

25.  $\text{Hg}_2\text{S}$  mercury(I)/mercurous sulfide
26.  $(\text{NH}_4)_2\text{S}$  ammonium sulfide
27.  $\text{Mg}_3\text{N}_2$  magnesium nitride
28.  $\text{H}_2\text{SO}_3$  sulfurous acid
29.  $\text{Cr}_2\text{O}_3$  chromium(III)/chromic oxide
30.  $\text{HF}$  hydrofluoric acid
31.  $\text{MnBr}_2$  manganese(II)/manganous bromide
32.  $\text{NO}_3^-$  nitrate

**Part II:** Write the correct formula for the following compounds.

33. sodium dichromate  $\text{Na}_2\text{Cr}_2\text{O}_7$
34. aluminum hydroxide  $\text{Al}(\text{OH})_3$
35. sulfur hexafluoride  $\text{SF}_6$
36. acetic acid  $\text{HC}_2\text{H}_3\text{O}_2$
37. silicate  $\text{SiO}_3^{2-}$
38. silver chlorate  $\text{AgClO}_3$
39. manganous nitrite  $\text{Mn}(\text{NO}_2)_2$
40. chlorine  $\text{Cl}_2$
41. lead(IV) hypochlorite  $\text{Pb}(\text{ClO})_4$
42. ammonium cyanide  $\text{NH}_4\text{CN}$
43. hydrocyanic acid  $\text{HCN}$
44. calcium arsenate  $\text{Ca}_3(\text{AsO}_4)_2$
45. silicon tetraiodide  $\text{SiI}_4$
46. plumbic bisulfate  $\text{Pb}(\text{HSO}_4)_4$
47. nitrogen  $\text{N}_2$
48. dichromate  $\text{Cr}_2\text{O}_7^{2-}$