Nomenclature Workshop

Binary Molecular Compounds

*Name each of the following compounds.*  
S2O3 NO2   
  
NO P2O5   
  
OF2 SO3   
  
NH3 PCl5   
  
SF6 XeO3   
  
P4O10 NI3   
  
HCl(g) HCl(aq)   
  
H2S(g) H2S(aq)   
  
*Provide formulas for each name.*  
dinitrogen monoxide hydrogen bromide   
  
carbon monoxide phosphorus tribromide   
  
hydrofluoric acid sulfur dioxide   
  
Ionic Compounds: Part One  
  
*Name each of the following compounds.*  
  
NaBr BaO   
  
AlCl3 MgS   
  
CdCl2 AgF   
  
NH4Br KNO3   
  
*Provide formulas for each name.*  
  
calcium fluoride zinc oxide   
  
gallium sulfide magnesium phosphide   
  
magnesium carbonate silver iodide   
  
lithium chlorate magnesium phosphate   
  
gallium sulfate barium nitride   
  
strontium nitrate sodium hydroxide   
  
Ionic Compounds: Part Two  
  
*Name each of the following compounds. Do not use old-style names (e.g. ferric) for this part.*  
  
CuCl2 CuCl   
  
CrO Cr2O3   
  
FeSO4 PbO2   
  
Mn(NO3)3 CrO3   
  
FeS SnF4   
  
*Provide formulas for each name.*  
  
chromium (III) nitrate lead (II) sulfate   
  
manganese (IV) oxide mercury (I) bromide   
  
molybdenum (III) sulfide iron (III) carbonate   
  
chromic chloride plumbous bromide   
  
stannic phosphide ferric oxide   
  
mercuric sulfide cupric phosphate

Ionic Compounds: Part Three  
  
*Name each of the following compounds. Do not use old-style names (e.g. ferric) for this part.*  
  
Na2SO3 KClO4   
  
CaHCO3 LiNO2   
  
Ag3PO3 Mg(BrO2)2   
  
NaClO KIO4   
  
FePO3 Cr(HSO3)2   
  
*Provide formulas for each name.*  
  
aluminum sulfite zinc hypoiodite   
  
calcium hydrogen phosphate sodium perbromate   
  
chromium (III) nitrite tin (IV) chlorite

Acids

*Name each of the following compounds.*HNO3 H2SO4   
  
H3PO4 H2CO3   
  
HC2H3O2 HNO2   
  
HClO4 HBrO3   
  
HIO H2SO3   
  
*Provide formulas for each name.*oxalic acid phosphorous acid   
  
periodic acid hypochlorous acid

All Compounds  
  
*Name each of the following compounds.*Ba(NO3)2 HF(aq)   
  
NH3 CaI2   
  
Cr3(PO4)2 ZnSO3   
  
Cl2O7 WO3   
  
KH2PO4 NiCl2   
  
H2S(g) HgS   
  
HBrO3 SrCO3   
  
KMnO4 Na2Cr2O7   
  
Na2C2O4 K3BO3   
  
Fe(CN)3 MgS2O3   
  
*Provide a formula for each of the following names.*  
  
carbon disulfide hydrosulfuric acid   
  
cadmium nitrite barium bromate   
  
nitrogen dioxide gallium nitrite   
  
sodium hydride potassium thiocyanate   
  
gold (III) cyanide manganese (III) sulfide   
  
aluminum nitrate calcium nitride   
  
barium hydroxide iodous acid   
  
potassium hydrogen carbonate sulfurous acid