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