**CHE1031 Chemical Naming Worksheet**Identify each as ionic (i), molecular (m), or acid (a) compounds:

LiF CO2 HCl H(NO3) SF4 CaBr2 AlCl3 CO CuO Fe2O3 H3(PO4) PCl3 K2O Pb(SO3) H2(SO4) N2O4 BaCl2 CrCl3 BaS P4O7 BeBr2

Name these ionic compounds:

Li(NO3) K(HSO4) Cu(CO3) Fe(ClO4)3 MgF2 SnO2 Fe2S3 Zn(CN)2 Sn3(PO4)2 K(IO4) Hg2S Cu(CH3CO2)2 Ti(SO4)2 K(MnO4) MgO CsBr CuCl MnO2 PbCl2 CoBr2 Al2O3 CaCl2 Na2(SO3) Name these molecular compounds:

N2O5 PCl5 SF6 SO2 PCl3 N2O NO P4O10 O2F2 S4N4 SiCl4 ClO ClF3 SF2 OF6 SeBr4 P2O5

NCl3 P4S6 S2Cl2 IF5 XeO3 Name these acids:  
H(ClO)

H3(PO4) H(NO3)

HCl H2(SO3) HI H(ClO3) H(IO3)

H(BrO2) H(CrO4) HBr H(NO2) H(ClO4) H(C2H3O2) HF H(ClO2)

Name these bases:

NaOH Ca(OH)2 CsOH Al(OH)3 NH3 Ba(OH)2

**Write formulas for these mixed compounds:**

calcium hydrogen sulfate beryllium phosphate nitrous acid sulfuric acid potassium chloride potassium hydrogen sulfide phosphorous pentachloride calcium iodide acetic acid sulfur hexafluoride iron (II) cyanide bromous acid sulfur trioxide silicon tetrachloride aluminum hydride lithium nitride phosphoric acid ammonium acetate chromium (III) sulfate copper (II) nitrate hydrosulfuric acid diphosphorous pentoxide dinitrogen tetroxide chlorine monoxide tin (II) bromide sodium oxide lead (IV) sulfide sodium sulfite

potassium chlorate ruthenium (III) nitrate

nitrogen difluoride potassium bromate

hydroiodic acid beryllium oxide nitrogen trichloride selenium tetrabromide ammonium carbonate zinc (II) sulfide cesium perchlorate calcium hydroxide silicon dioxide sodium selenate ammonium hydrogen phosphate lithium hydroxide