

Ionic Chemical Formulas/PreAICE Chemistry

NAME: _____ PERIOD _____

Directions: Using the Chemical Formulas program sheet, fill in the table below. Use subscripts & superscripts. Remember to use roman numerals to show the valence of the transition metals in the compound name.

| METAL CATION (+) | CATION FORMULA | NONMETAL ANION (-) | ANION FORMULA | COMPOUND FORMULA | COMPOUND NAME |
|------------------|----------------|--------------------|---------------|------------------|-----------------------|
| sodium | Na+1 | hydroxide | OH- | NaOH | sodium hydroxide |
| magnesium | Mg+2 | phosphate | PO4-3 | Mg3(PO4)2 | magnesium phosphate |
| calcium | Ca+2 | chloride | Cl- | CaCl2 | calcium chloride |
| gold(I) | Au+1 | sulfite | SO3-2 | Au2SO3 | gold(I) sulfite |
| copper(II) | Cu+2 | hydroxide | OH- | Cu(OH)2 | copper(II) hydroxide |
| Iron(III) | Fe+3 | telluride | Te-2 | Fe2Te3 | iron(III) telluride |
| magnesium | Mg+2 | bromide | Br-1 | MgBr2 | magnesium bromide |
| manganese(II) | Mn+2 | sulfide | S-2 | MnS | manganese(II) sulfide |
| boron | B+3 | oxide | O-2 | B2O3 | boron oxide |
| potassium | K+ | nitrate | NO3- | KNO3 | potassium nitrate |
| barium | Ba+2 | bromide | Br- | BaBr2 | barium bromide |
| strontium | Sr+2 | sulfate | SO4-2 | SrSO4 | strontium sulfate |
| iron(III) | Fe+3 | oxide | O-2 | Fe2O3 | iron(III) oxide |
| silver(I) | Ag+1 | chloride | Cl- | AgCl | silver(I) chloride |
| aluminum | Al+3 | carbonate | CO3-2 | Al2(CO3)3 | aluminum carbonate |
| gold(II) | Au+2 | nitride | N-3 | Au3N2 | gold(II) nitride |
| cesium | Cs+1 | phosphate | PO4-3 | Cs3PO4 | cesium phosphate |
| ammonium | NH4+ | sulfide | S-2 | (NH4)2S | ammonium sulfide |
| zinc(II) | Zn+2 | nitrite | NO2- | Zn(NO2)2 | zinc(II) nitrite |
| chromium(I) | Cr+1 | nitride | N-3 | Cr3N | chromium(I) nitride |
| mercury(II) | Hg+2 | oxide | O-2 | HgO | mercury(II) oxide |
| sodium | Na+ | sulfite | SO3-2 | Na2SO3 | sodium sulfite |
| magnesium | Mg+2 | oxide | O-2 | MgO | magnesium oxide |