

## 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       |