**Ionic Formula Writing**

First of all, get familiar with the ion pieces. Look to see which ions have what charge and how they are named. Since the cations lose electrons, they are symbolized by notches, while anions are symbolized by tabs since they take electrons. Generally, cations take the name of the element, while anions take the root plus –ide.

Answer all of the following questions as a group. Turn in one paper per group.

1. What charge does a hydrogen ion have?
2. What charge does an oxide ion have?
3. How many hydrogen ions will fit with an oxide ion?
4. What is the overall charge of the ionic compound made with hydrogen and oxide?
5. For the following pairs, determine the number of each type of ion that is needed to make a compound and predict the formula.

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|  | **Number of Each Ion Needed** | **Chemical Formula** |
| 1. Sodium and Nitrate
 |  |  |
| 1. Ammonium and Sulfate
 |  |  |
| 1. Lithium and Hydroxide
 |  |  |
| 1. Potassium and Phosphate
 |  |  |
| 1. Silver and Carbonate
 |  |  |
|  | **Number of Each Ion Needed** | **Chemical Formula** |
| 1. Copper and Fluoride
 |  |  |
| 1. Calcium and Iodide
 |  |  |
| 1. Lead and Sulfite
 |  |  |
| 1. Zinc and Hydroxide
 |  |  |
| 1. Magnesium and Sulfide
 |  |  |
| 1. Barium and Bromide
 |  |  |
| 1. Aluminum and Nitrate
 |  |  |
| 1. Iron (III) and Phosphate
 |  |  |
| 1. Iron (II) and Phosphate
 |  |  |

7. Write the process (in your own words) for determining the name of an ionic compound.