Writing Chemical Formulas

- 1. Write the symbol of the positively charged ion/element first.
- 2. Write the symbol of the negatively charged ion/element next.
- 3. Write the oxidation numbers as superscripts behind the symbols.
- 4. If the sum of the oxidation numbers = 0, skip to step 7.
- 5. If the sum of the oxidation numbers ≠ 0, use the criss-cross method to find the correct subscripts so the charge of the compound is 0.
- 6. Make sure the sum of the oxidation numbers =0.
- 7. Write the final formula with symbols and subscripts only!!

Writing Formula Names

- 1. Write the name of the first element or polyatomic ion.
- 2. IF a binary compound, write the root of the second element, add *-ide*.
- 3. IF a polyatomic ion, write the name of the ion unchanged.
- 4. Check to see if the first element is a transition metal.
- 5. IF a transition metal, find out what the oxidation number is.
- 6. If the transition metal is variable (more than one oxidation number) write the oxidation number as a roman numeral after the name in parentheses.