**Product Types:**



**Oxidation Numbers (charges):**



**Steps to Writing Chemical Formulas:**

1. Write positive ion first
2. Write negative ion second
3. Add the oxidation numbers
	1. If they equal zero, then you are done
	2. If they don’t equal zero, then figure out how many of each you need (“making the charges balance” or “Criss-Cross Method”)
* move the charge of one atom and make it the subscript for the other

Examples:

**Polyatomic Ions to Know:**

CO3-2 carbonate

SO4-2 sulfate

* Treat polyatomic ions as a group.
* Remember that the charge is for the WHOLE GROUP together.
* Use parenthesis if there is more than 1!

SCN-1 thiocyanate

NO3-1 nitrate

PO4-3 phosphate

NH4+ ammonium

OH-1 hydroxide

C2H3O2-1 acetate

CrO4-2 chromate

MnO4-1 permanganate

Example: Be + NO3 🡪

**Practice Compounds to Create:**

1. K and Se \_\_\_\_\_\_\_\_\_\_\_\_

2. Na and OH \_\_\_\_\_\_\_\_\_\_\_\_

3. NH4 and S \_\_\_\_\_\_\_\_\_\_\_\_

4. C2H3O and Li \_\_\_\_\_\_\_\_\_\_\_

5. CO3 and Ga \_\_\_\_\_\_\_\_\_\_\_\_

6. PO4 and Na \_\_\_\_\_\_\_\_\_\_\_\_