**Polyatomic Ions**

**Learning Target:**

**The students with learn what Poly atomic ions are, what kind of compounds they create and how to write the formulas of compounds with polyatomic ions in them.**

**Polyatomic ions: Are covalently bonded compounds that stay together as ions when they react.**

**Example:**

**Na + OH 🡪 +1NaOH-1**

# Stays together before and after reaction and called Hydroxide (Ox. # = -1)

**When writing formulas with polyatomic ions you “cross” the oxidations as subscripts.**

**Example: +2Ca (OH-1)2 : Name??**

**Calcium Hydroxide**

**When you need more than one polyatomic in the formula you need to use parentheses.**

**The Polyatomic Ions that you will need to know are:**

**Phosphate: PO4-3**

**Hydroxide: OH-1**

**Sulfate: SO4-2**

**Nitrate: NO3-1**

**Carbonate: CO3-2**

**Ammonium: NH4+1**

**Name the following:**

**Na3PO4**

**Sr(OH)2**

**Al2(SO4)3**

**Give the formulas for the following:**

**Calcium Nitrate**

**Ammonium Phosphate**

**Thallium Acetate**

**Boron Carbonate**

**Nickel (V) Sulfate**