Naming Acids and Bases:

**ACIDS**

Acids are ionic compounds, in solution with water, with H+ acting as the metal. Examples include *Hydrochloric Acid (HCl), Hydrofluoric Acid (HF), Hydronitric Acid (H3N), Sulfuric Acid (H2SO4) and Chlorous Acid (HClO2).*

What we want to understand is how the names for the acids are determined. There are 3 general rules:

 **1. If the non-metal part of the acid is an *element* (Cl-, N3-, Br-…) the name of the acid is:**

Hydro \_\_\_\_\_\_\_\_\_\_ ic Acid

 where the blank is the beginning of the element’s name:

 EX: HCl : Hydro\_\_\_\_\_\_\_\_\_\_ic Acid

 HBr : Hydro\_\_\_\_\_\_\_\_\_\_ic Acid

 H2S : Hydro\_\_\_\_\_\_\_\_\_\_ic Acid

 **2. If the non-metal is a polyatomic ion ending in “ATE” (CO32- carbonate, SO42- sulfate…) the name of the acid is:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ic Acid

 where the blank is the beginning of the name of the polyatomic ion.

 \*NO HYDRO AT THE START

 EX: H2CO3: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ic Acid

 H3PO4: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ic Acid

 HMnO4: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ic Acid

 **3. If the non-metal is a polyatomic ion ending in “ITE” (ClO2- chlorite, SO32- sulfite…) the name of the acid is:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ous Acid

 where the blank is the beginning of the name of the polyatomic ion.

 \*NO HYDRO AT THE START

 EX: H2SO3: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ous Acid

 H3PO3: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ous Acid

 HNO2: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ous Acid

**BASES:**

Bases are ionic compounds with hydroxide, OH-, acting as the non metal, in solution with water.

There is no special rule for naming them, we just name them as an ionic compound.

 EX: NaOH : sodium hydroxide

 Mg(OH)2 : magnesium hydroxide

 Al(OH)3 : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_