Unit 10.1: Naming Acids

**I. Naming Acids WITHOUT Oxygen**

* Acids without Oxygen are named with the prefix “\_\_\_\_\_\_\_\_\_\_\_\_\_\_” and end in “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_”

Examples: HCl Hydrochloric Acid

HF \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Acid

HBr\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Acid

**II. Naming Acids WITH Oxygen**

* For some acids with oxygen have several forms, there are prefixes used with the regular “\_\_\_\_\_\_\_\_\_\_\_\_\_\_” and “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_” endings.

The “ic” or regular ending for an acid comes from the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ion with the “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_” ending. This gives the regular count for the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ for this type of acid.

Example:

H2SO4 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is Sulfate so this acid is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Acid

* Once you know the “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_” ending you count the number of oxygen in the other forms to find the name for the acid. (REMEMBER: The regular “ic” form comes from the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ion that ends with “ate”)
* \_\_\_\_\_\_\_\_\_\_\_\_ less oxygen Hypo \_\_\_\_\_\_\_\_\_\_\_\_\_ “ous” Acid
* \_\_\_\_\_\_\_\_\_\_\_\_ less oxygen \_\_\_\_\_\_\_\_\_\_\_\_\_ “ous” Acid
* Regular “ic” form \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ “ic” Acid
* \_\_\_\_\_\_\_\_\_\_\_\_ more oxygen Per \_\_\_\_\_\_\_\_\_\_\_\_\_ “ic” Acid

The other names for the acids will come from the count based from the “regular acid name”

* H2SO4 “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_” ending so it is Sulfuric Acid
* H2SO3 “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_” ending so it is Sulfurous Acid
* H2SO2 two \_\_\_\_\_\_\_\_\_\_\_\_\_ oxygen will have a prefix and “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_” ending. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Acid.
* H2SO5 one more oxygen will have a prefix “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_” and the regular “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_” ending. Persulfuric Acid