Naming Binary Acids:

Acids are hydrogen-containing compounds that yield hydrogen ions (H^+) when dissolved in water. Binary acids are acids that consist of two elements.

Rules for naming binary **acids**: Use these rules when the compound is in the aqueous state only!

Type 1 – No polyatomic Ion

1. Start with "hydro"
2. Name the second element, ending in -ic
3. Suffix: "acid"

Example:

HCl = Hydrochloric Acid

Type 2 – Containing a polyatomic ion

1. Name the polyatomic ion, ending in -ic
2. Suffix: "acid"

Example:

H_2SO_4 = Sulphuric Acid or Sulfuric Acid

Exercises:

Name each of the following acids:

1. HBr _____
2. HF _____
3. H_2S _____
4. H_3P _____
5. HNO_3 _____
6. H_2SO_4 _____
7. H_3PO_4 _____

Given the name, provide the formula for each of the following acids:

1. Hydroiodic Acid _____
2. Carbonic Acid _____
3. Hydrochloric Acid _____
4. Phosphoric Acid _____