

CONCEPT: NAMING ACIDS

- **Acid:** usually a *covalent compound* beginning with a **hydrogen ion** called the _____ ion.
 - **Covalent Compound:** a compound that contains only _____ bonded together

Common Acids



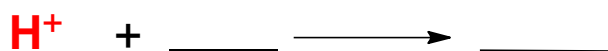
Acetic Acid



Binary Acids

- Represent covalent compounds containing the **H⁺ ion** bonded to a nonmetal anion that is not _____.

Binary Acid Formation



Rules for Naming Binary Acids

STEP 1: The prefix will be _____ to represent the **H⁺ ion**.

STEP 2: Use the base name of the nonmetal.

- When naming acids, we must use _____ for the element S and _____ for the element P.

STEP 3: The suffix will be _____.

EXAMPLE: Write the formula for each of the following compounds:

a. Hydroiodic acid

b. Hydroselenic acid

c. Hydrofluoric acid

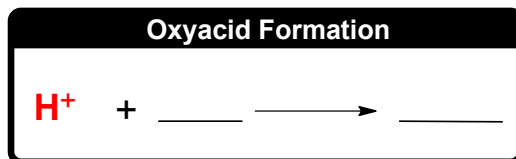
PRACTICE: Give the systematic name for the following compound: H₂S

PRACTICE: Give the systematic name for the following compound: HCN

CONCEPT: NAMING ACIDS

Oxyacids

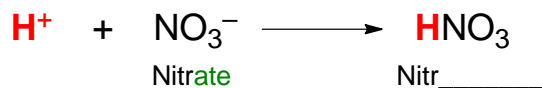
- Represent covalent compounds containing the **hydrogen ion** bonded to polyatomic ion containing _____.



Rules for Naming Oxyacids

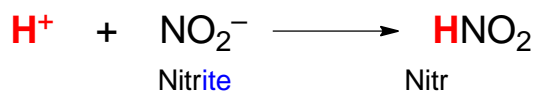
- 1) If the polyatomic ion ends with *-ate* then change the ending to _____.

MEMORY TOOL I _____ an acid and it was _____!



- 2) If the polyatomic ion ends with *-ite* then change the ending to _____.

MEMORY TOOL I only _____ into things that are _____.



EXAMPLE: Write the formula for each of the following compounds:

a. H_2CO_3

b. H_3PO_3

c. H_2SO_4

PRACTICE: Write the formula for the following compound: Hypobromous acid

PRACTICE: Write the formula for the following compound: Cyanic acid