# Naming Acids

**Acids (produce $H^+$ ions in solution)**

**Binary Acid:**
$H^+$ and an anion
(no oxygen)

**Oxyacid:**
$H^+$ and oxyanion

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**hydro - "root name" - ic acid**

**HF**

**hydrofluoric acid**

**Oxyacid:**
$H^+$ and oxyanion

# Acids (produce $H^+$ ions in solution)

**Binary Acid:**
$H^+$ and an anion

**Oxyacid:**
$H^+$ and oxyanion

**change the ending of the oxyanion**

**-ate → -ic**

**-ite → -ous**

**$HNO_3$**

**nitrate → nitric**

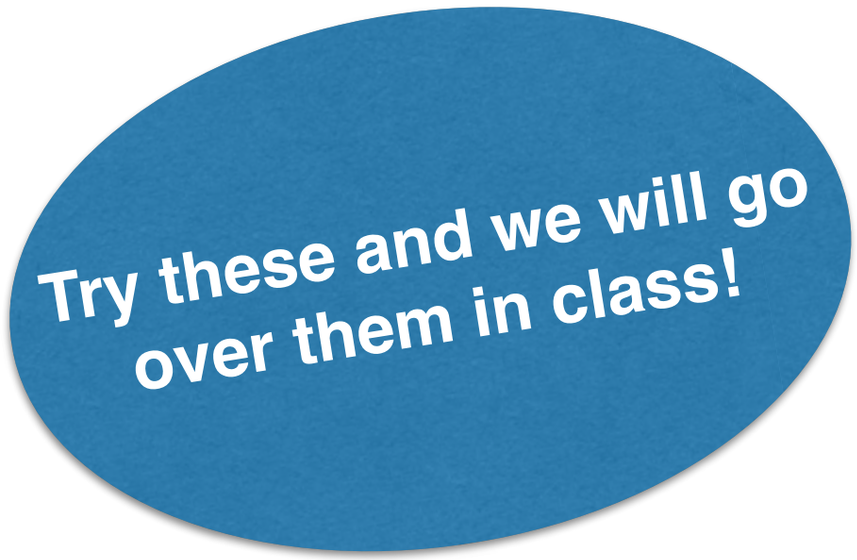
**nitric acid**

# Special Names:

| anion | root | example |
| --- | --- | --- |
| **phosphide/ phosphate** | “phosphor” | phosphoric acid |
| **sulfide/sulfate/ sulfite** | “sulfur” | sulfuric acid |

# Practice

1) **HI**
2) **$H_3P$**
3) **$HClO_2$**
4) **$HClO_3$**



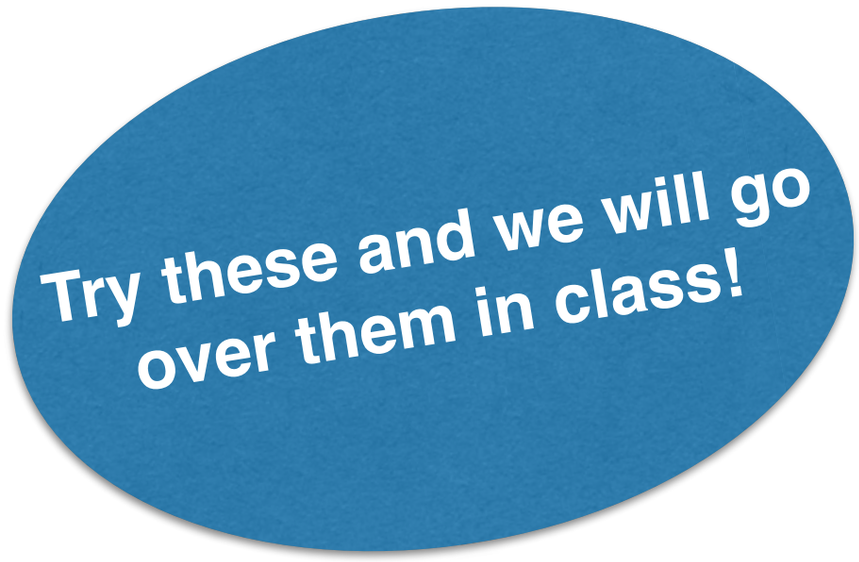
# Practice

| | | |
|---|---|---|
| 1) **HI** | binary | **hydroiodic acid** |
| 2) **$H_3P$** | binary | **[illegible]d** |
| 3) **$HClO_2$** | oxyacid | **[illegible]** |
| 4) **$HClO_3$** | oxyacid | **chloric acid** |

**Answers…will go over in class!**

# Practice

1) **hydrocyanic acid**
2) **hydroselenic acid**
3) **perchloric acid**
4) **acetic acid**



# Practice

| | | |
|---|---|---|
| 1) **hydrocyanic acid** | binary | **HCN** |
| 2) **hydroselenic acid** | binary | **Answers …will go over in** |
| 3) **perchloric acid** | oxyacid | |
| 4) **acetic acid** | oxyacid | **$HC_2H_3O_2$** |