**Common Acids and Bases Information - Must Know how to spell names correctly and write their chemical formulas! Also, you should know your polyatomic ions if you still have not memorized them!**

**Strong Acids Weak Acids**

HCl – hydrochloric acid HF – hydrofluoric acid

HBr – Hydrobromic acid H2S – hydrosulfuric acid

HI – hydroiodic acid HNO2 – nitrous acid

HNO3 – Nitric acid CH3COOH – acetic acid

H2SO4 – sulfuric acid H2SO3 – sulfurous acid

HClO3 – chloric acid H3PO4 – phosphoric acid

HClO4 – perchloric acid

Organic Acids end in -COOH – ex. CH3COOH – acetic acid - vinegar

**Strong Bases – made from Group I and II metals Weak Bases – any nongroup I & II metals and**

**With hydroxides hydroxides or:**

Ca(OH)2 – Calcium hydroxide NH3 - Ammonia

Sr(OH)2 - Strontium hydroxide C5H5N - Pyridine

Ba(OH)2 – Barium hydroxide Al(OH)3 – Aluminum hydroxide

NaOH – Sodium hydroxide

RbOH – Rubidium hydroxide

CsOH – Cesium hydroxide

KOH – Potassium hydroxide

LiOH – Lithium hydroxide

**Common Acids and their Uses:**

• Sulfuric Acid (H2SO4) - “battery acid” - Most commonly produced industrial chemicals in the world

• Nitric Acid (HNO3) - Volatile, unstable liquid; Used in explosives; Turns proteins yellow

• Phosphoric Acid (H3PO4) - Used in fertilizers, animal feed, soda, detergents

• Hydrochloric Acid (HCl) - “stomach acid” - Used in steel making & food processing

• Acetic Acid (HC2H3O2) - “vinegar” - Used in food industry, fungicides, plastics

**Common Bases and their Uses:**

* Sodium Hydroxide (NaOH) - “lye”- drain cleaner, oven cleaner, soap making
* Potassium Hydroxide (KOH) - Liquid soap, potash
* Magnesium Hydroxide (Mg(OH)2) - antacids
* Calcium Hydroxide (Ca(OH)2) - Slaked lime
* Ammonia Water (NH3) - Cleaning products Strength