Rules for Naming Acids

Anion Ending	Acid Name
-ide	hydro-(stem)-ic acid
-ite	(stem)-ous acid
-ate	(stem)-ic acid

Solubility Rules

Compounds	Solubility
Alkali metals + ammonia	Soluble
Nitrate + chlorate salts	Soluble
Sulfate [Pb^{2+}, Ag^{+}, Hg^{2+}, Ba^{2+}, Sr^{2+}, Ca^{2+}]	Soluble
Chloride [Ag^{+}, Pb^{2+}, Hg^{2+}]	Soluble
Carbonate, Phosphate, chromate, sulfide + hydroxide	→ Most insoluble

Equations

$c = \lambda \nu$

$$\text{mass} \underset{\div mm}{\overset{* mm}{\rightleftarrows}} \text{mol}$$

$$L \underset{\times 22.4}{\overset{* 22.4}{\rightleftarrows}} \text{mol}$$

$$\text{rep. part.} \underset{\times 6.02\times10^{23}}{\overset{\div 6.02\times10^{23}}{\rightleftarrows}} \text{mol}$$

% mass of element = $\frac{\text{mass of element}}{\text{mass of compound}} \times 100\%$

percent yield = $\frac{\text{actual}}{\text{theoretical}} \times 100\%$

Molarity (M) = $\frac{\text{moles of solute}}{\text{volume of solution}}$

$M_1 V_1 = M_2 V_2$

$c = 2.998 \times 10^{8}$ m/s (unless otherwise stated)

Avogadro's Number = 6.02×10^{23}