

Stoichiometry Formula Sheet:

Mass, Moles, & Molar Mass: $\textcolor{red}{n} \rightarrow \text{moles}$ $\textcolor{red}{m} \rightarrow \text{mass (g)}$ $\textcolor{red}{M}_w \rightarrow \text{molar mass (g/mol)}$	$n = \frac{m}{M_w} \quad m = n * M_w \quad M_w = \frac{m}{n}$ $1 \text{ mol} = 6.02 \times 10^{23} \quad 1 \text{ dozen} = 12$
Percent Composition:	$\text{mass \%} = \frac{\text{mass of element}}{\text{Total mass}} \times 100\%$
Percent Yield:	$\% \text{ Yield} = \frac{\text{Actual Yield}}{\text{Theoretical Yield}} \times 100\%$
Percent Error:	$\% \text{ Error} = \frac{ \text{Measured Value} - \text{Actual Value} }{\text{Actual Value}} \times 100\%$
Concentration: (Molarity) $\textcolor{red}{n} \rightarrow \text{moles of solute}$ $\textcolor{red}{V} \rightarrow \text{Volume of Solution (Liters)}$ $\textcolor{red}{M} \rightarrow \text{Molarity (mol/L)}$	$M = \frac{n}{V} \quad n = MV \quad V = \frac{n}{M}$
The Dilution Equation:	$M_1 V_1 = M_2 V_2$