



Quantitative Chemistry **Equations**

$$\text{percentage by mass} = \frac{\text{relative atomic mass of element}}{\text{relative formula mass of compound}} \times 100$$

$$\text{number of moles} = \frac{\text{mass}}{M_r}$$

$$\text{concentration} = \frac{\text{mass}}{\text{volume}}$$

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$$\text{percentage yield} = \frac{\text{mass of product actually made}}{\text{maximum theoretical mass of product}} \times 100$$

$$\text{percentage atom economy} = \frac{M_r \text{ of desired product from equation}}{\text{sum of } M_r \text{ of all reactants from equation}} \times 100$$