

Stoichiometry Conversions

Mass
(g)

Mass
(g)

$$\text{mass} \times \frac{1 \text{ mol}}{\text{molar mass}}$$

$$\text{moles} \times \frac{\text{molar mass}}{1 \text{ mol}}$$

Volume
(L)

Volume
(L)

$$\text{volume} \times \frac{1 \text{ mol}}{22.4 \text{ L}}$$

$$\text{moles} \times \frac{\text{moles sought}}{\text{moles given}}$$

$$\text{moles} \times \frac{22.4 \text{ L}}{1 \text{ mol}}$$

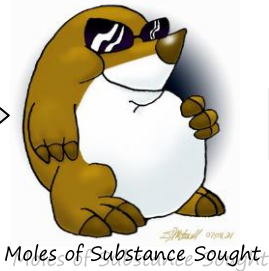
Particles
(molecules, ions, atoms,
formula units, etc.)

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formula units, etc.)

$$\# \text{ particles} \times \frac{1 \text{ mol}}{6.02 \times 10^{23} \text{ particles}}$$

$$\text{moles} \times \frac{6.02 \times 10^{23} \text{ particles}}{1 \text{ mol}}$$

Mole Ratio Step



This ratio is derived from the coefficients of the balanced equation.