Flowchart: Calculations involving the mole (n)

Asked for reagent

**n**

Using a balanced equation

$$n\_{(a)}=\frac{Coeff\_{(a)}}{Coeff\_{(g)}}×n\_{(g)}$$

Volume of a gas at STP

**V**

Volume of a gas at SLC

**V**

$$n=\frac{V}{22.4}$$

$$n=\frac{V}{24.3}$$

$$V=n×24.3$$

$$V=n×22.4$$

Given reagent

**n**

Mass of a solid

**m**

Conc & Vol of a solution

**C** & **V**

$$n=\frac{m}{MM}$$

$$m=n×MM$$

$$n=C×V$$

$$C=\frac{n}{V}$$

$$n\_{(g)}$$

$$n\_{(a)}$$

Mass of a solid

**m**

$$m=n×MM$$

Conc of a solution

**C**

$$C=\frac{n}{V}$$

Volume in L of a gas at STP

**V**

Volume of a gas at SLC

**V**

$$V=n×24.3$$

$$V=n×22.4$$