chemistry formulas

TEMPERATURA CONVERSIONS

F° → C°

$$C° = \frac{5}{9}(F° - 32)$$

C° → F°

$$F° = \frac{9}{5}C° + 32$$

C° → K°

$$K° = C° + 273.15$$

K° → C°

$$C° = K° - 273.15$$

PERCENT ERROR

$$\frac{\text{Actual value} - \text{Measured value}}{\text{Actual value}} \times 100\%$$

MOLE → MASS

$$\text{mole} \times mm = \text{grams}$$

MASS → MOLE

$$\frac{\text{mass}}{mm} = \text{mole}$$

AVOGADRO'S NUMBER

$$1 \text{ mole} = 6.02 \times 10^{23}$$

TITRATION

$$N_a V_a m_a = N_b V_b m_b$$

V = volume

M = molarity

N = moles

PERCENT COMPOSITION

$$\text{percent composition} = \frac{\text{total molar mass of just the element}}{\text{molar mass of the whole compound}}$$

GAY-LUSSAC'S LAW

$$\frac{P_1}{T_1} = \frac{P_2}{T_2}$$

P = pressure

T = temperature

CHARLE'S LAW

$$\frac{V_1}{T_1} = \frac{V_2}{T_2}$$

V = volume

T = temperature

Boyle's Law

$$P_1 V_1 = P_2 V_2$$

P = pressure

V = volume

COMBINED GAS LAW

$$\frac{P_1 V_1}{T_1} = \frac{P_2 V_2}{T_2}$$

P = pressure

V = volume

T = temperature

DILUTION

$$M_1 V_1 = M_2 V_2$$

M = molarity

V = volume