

Ideal Gas Law:

$$PV = nRT$$

Combined Gas Law:

$$P \frac{P_1 V_1}{n_1 T_1} = \frac{P_2 V_2}{n_2 T_2}$$

Density of gases:

$$d = \frac{\mathcal{M}P}{RT}$$

Molar mass of Gases:

$$\mathcal{M} = \frac{dRT}{P}$$

Formal Charges:

Formal Charge = Valence Electrons – (Unpaired Electrons + Bonds)

Molecular Shapes:

