

Chemistry Formula and Constants Sheet

Common Polyatomic Ions

Ammonium	NH_4^+
Carbonate	CO_3^{-2}
Hydroxide	OH^-
Nitrate	NO_3^-
Phosphate	PO_4^{-3}
Sulfate	SO_4^{-2}

Ideal Gas Law: $PV = nRT$

Absolute Temp. Conversion: $K = ^\circ\text{C} + 273$

Definition of pH: $\text{pH} = -\log [\text{H}_3\text{O}^+]$

Specific Heat of Water: $c = 1.00 \text{ cal/g}^\circ\text{C}$
 $c = 4.18 \text{ J/g}^\circ\text{C}$

Mole-Volume of Ideal Gas at STP: 22.4 L

Ideal Gas Constant: $R = 0.0821 \text{ L}\cdot\text{atm/mol}\cdot\text{K}$
 $R = 8.314 \text{ L}\cdot\text{kPa/mol}\cdot\text{K}$

Avogadro's Number: 6.02×10^{23}

STP: 1.0 atm, 0°C