

Physical Science Reference Tables

MOTION AND ENERGY

$$v = \frac{\Delta d}{\Delta t}$$

v = velocity

$$a = \frac{v_f - v_i}{\Delta t}$$

d = position

$$\rho = mv$$

t = time

$$F = ma$$

a = uniform acceleration

$$F_g = mg$$

ρ = momentum

$$W = F\Delta d$$

m = mass

$$P = \frac{W}{\Delta t}$$

F = force

$$v_w = f\lambda$$

F_g = weight

$$IMA = \frac{D_E}{D_R}$$

g = acceleration due to gravity on Earth = 9.8 m/s/s

$$AMA = \frac{F_R}{F_E}$$

W = work

$$Efficiency = \frac{W_{out}}{W_{in}} \times 100$$

P = power

v_w = wave velocity

f = frequency

λ = wavelength

IMA = ideal mechanical advantage

D_E = input distance

D_R = output distance

AMA = actual mechanical advantage

F_R = output force

F_E = input force

ELECTRICITY

$$V = IR$$

V = electrical potential difference

I = current

$$P = IV$$

R = resistance

P = power

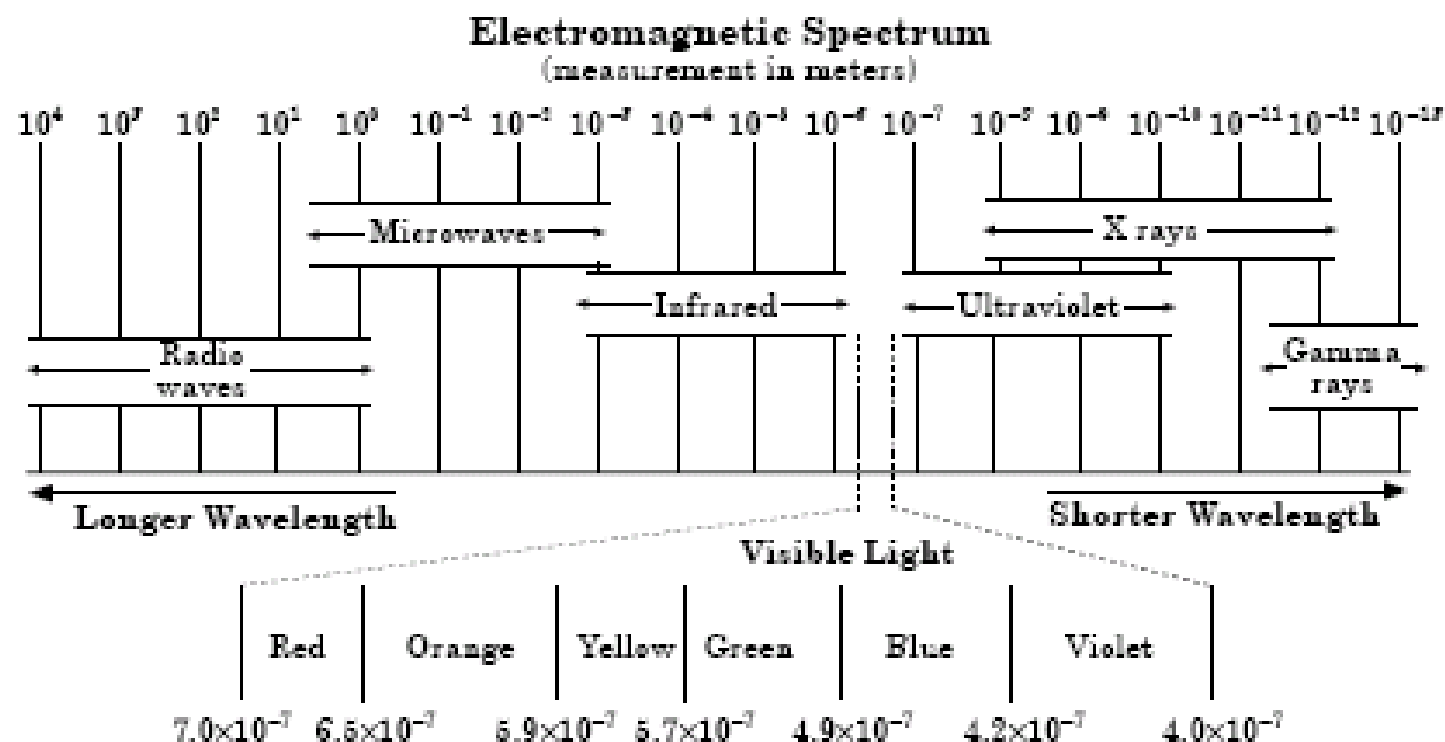
DENSITY

$$D = \frac{m}{V}$$

D = density

m = mass

V = volume



Polyatomic Ions

NH_4^+	Ammonium	OH^-	Hydroxide
$\text{C}_2\text{H}_3\text{O}_2^-$	Acetate	CO_3^{2-}	Carbonate
ClO_3^-	Chlorate	CrO_4^{2-}	Chromate
MnO_4^-	Permanganate	SO_4^{2-}	Sulfate
NO_3^-	Nitrate	PO_4^{3-}	Phosphate