

Physical Science Reference Tables

MOTION AND ENERGY

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

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

$$F = ma$$

$$F_g = mg$$

$$p = mv$$

$$W = F\Delta d$$

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

$$PE_g = mgh = F_g h$$

$$KE = \frac{1}{2}mv^2$$

$$IMA = \frac{d_E}{d_R}$$

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

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

$$v_w = f\lambda$$

v = velocity

d = position

t = time

a = uniform acceleration

F = force

m = mass

F_g = weight

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

p = momentum

W = work

P = power

PE_g = gravitational potential energy

h = height

KE = kinetic energy

IMA = ideal mechanical advantage

AMA = actual mechanical advantage

R = resistance

E = effort

v_w = wave velocity

f = frequency

λ = wavelength

ELECTRICITY

$$V = IR$$

$$P = VI$$

DENSITY

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

V = electrical potential difference

I = current

R = resistance

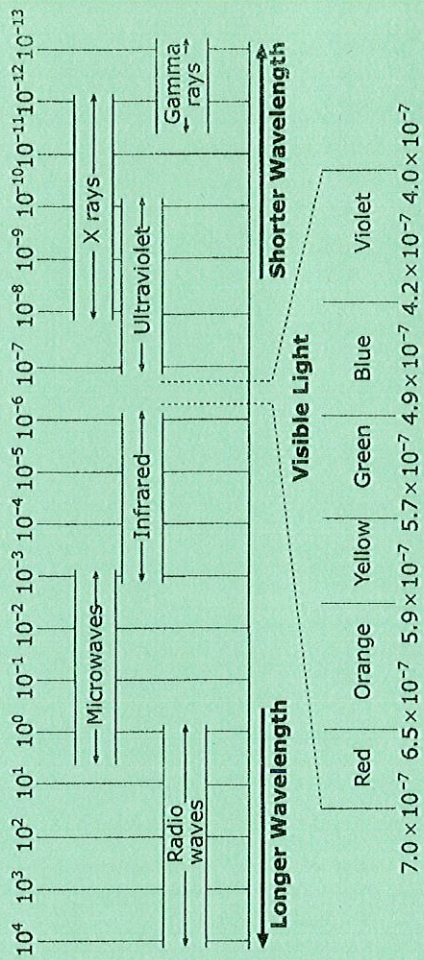
P = power

D = density

m = mass

V = volume

Electromagnetic Spectrum (measurement in meters)



Polyatomic Ions

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