Reference ♦ PHYSICAL SCIENCE ♦ Information

Acceleration $= \frac{\text{final velocity} - \text{initial velocity}}{\text{time}}$ $\left(a = \frac{v_f - v_i}{t}\right)$

Speed $= \frac{\text{distance}}{\text{time}}$ $\left(v = \frac{d}{t}\right)$

Density $= \frac{\text{mass}}{\text{volume}}$ $\left(D = \frac{m}{V}\right)$

Force = mass x acceleration $(F = ma)$

Power $= \frac{\text{work}}{\text{time}}$ $\left(p = \frac{W}{t}\right)$

Work = force x distance $(W = Fd)$

Mechanical advantage $= \frac{\text{effort distance}}{\text{resistance distance}}$ $\left(MA = \frac{d_e}{d_r}\right)$

Efficiency $= \frac{\text{work out}}{\text{work in}}$ $\left(e = \frac{W_o}{W_i}\right)$

Kelvin = °Celsius + 273 $(K = °C + 273)$

Voltage = current x resistance $(V = IR)$

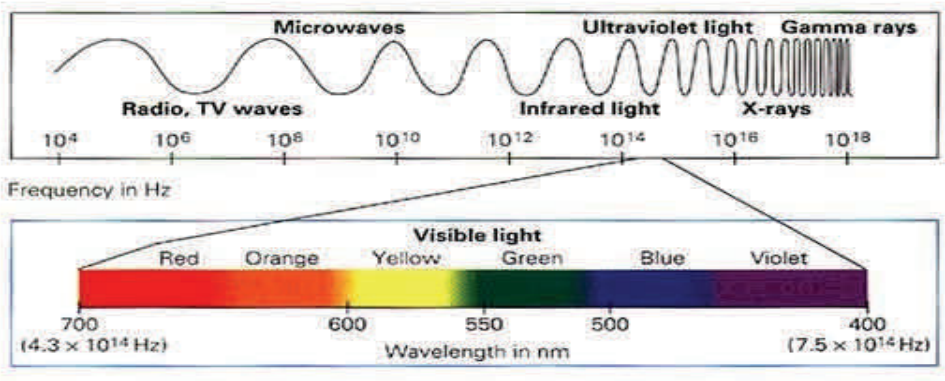
Weight = mass x acceleration of gravity $(w = mg)$

Acceleration of gravity $= g \approx 10 \frac{m}{sec^2}$

Volume of a rectangular solid = length x width x height $(V = lwh)$

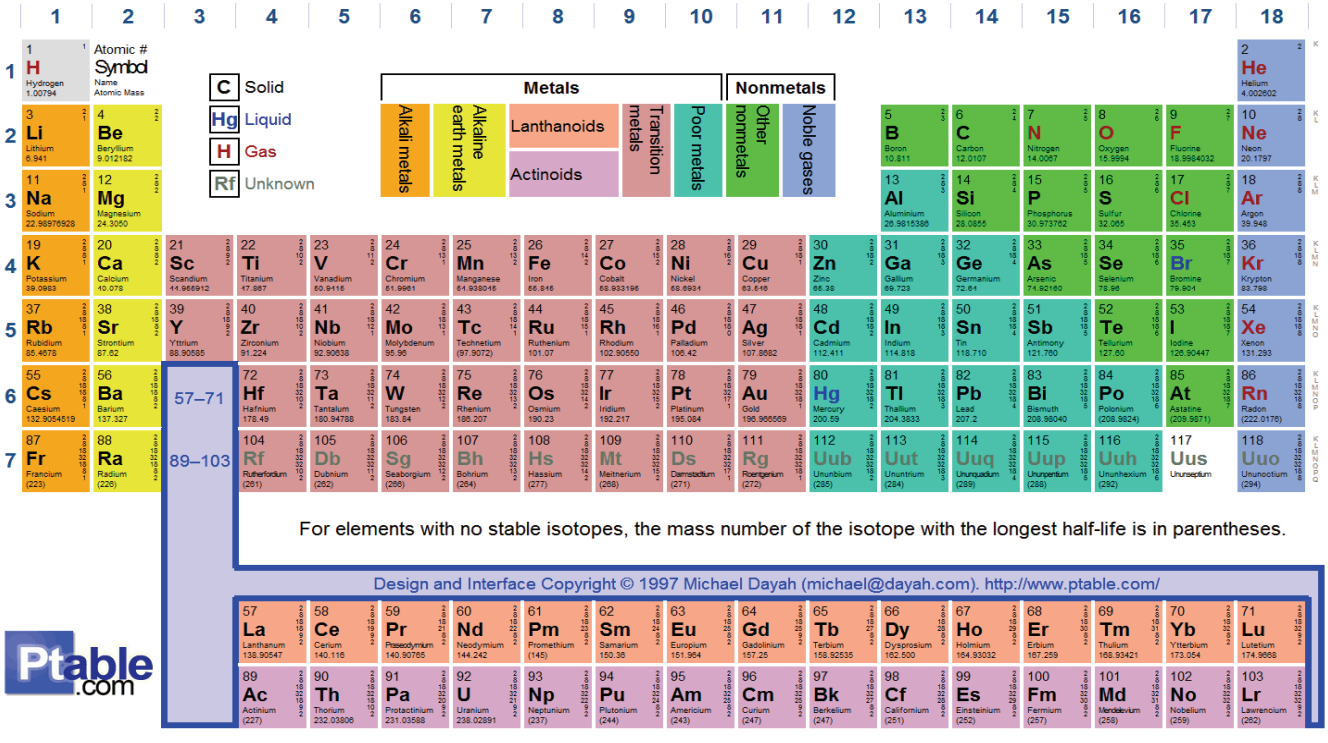
$F_{gravity} = \frac{km_1m_2}{d^2}$

10^n	Prefix	Symbol	Decimal
10^{24}	yotta-	Y	1 000 000 000 000 000 000 000 000
10^{21}	zetta-	Z	1 000 000 000 000 000 000 000
10^{18}	exa-	E	1 000 000 000 000 000 000
10^{15}	peta-	P	1 000 000 000 000 000
10^{12}	tera-	T	1 000 000 000 000
10^{9}	giga-	G	1 000 000 000
10^{6}	mega-	M	1 000 000
10^{3}	kilo-	k	1 000
10^{2}	hecto-	h	100
10^{1}	deca-	da	10
10^{0}	*(none)*	*(none)*	1
10^{-1}	deci-	d	0.1
10^{-2}	centi-	c	0.01
10^{-3}	milli-	m	0.001
10^{-6}	micro-	μ	0.000 001
10^{-9}	nano-	n	0.000 000 001
10^{-12}	pico-	p	0.000 000 000 001
10^{-15}	femto-	f	0.000 000 000 000 001
10^{-18}	atto-	a	0.000 000 000 000 000 001
10^{-21}	zepto-	z	0.000 000 000 000 000 000 001
10^{-24}	yocto-	y	0.000 000 000 000 000 000 000 001



http://web.princeton.edu/sites/ehs/laserguide/spectrum.jpg

Periodic Table of Elements



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