Specific charge = charge / mass

Minimum energy for pair production is 2 lots of the rest energy

Threshold frequency = work function / h

e x Vs = max kinetic, e is the charge of an electron and Vs is the stopping potential

Wave speed = distance / time

$\mu = M / L$, mass per unit length = mass of string / length

Tension in investigating resonant frequency = mg, m is the mass of the objects pulling on the string

Constructive interference occurs when the path difference is $n\boldsymbol{\lambda}$

Destructive interference occurs when the path difference is $(n + ½)\boldsymbol{\lambda}$

In double slit, sin(theta) = path difference / slit seperation

In double slit, tan(theta) = fringe spacing / Distance between slit and screen

Weight = mg

Momentum = mass x velocity

Impulse = change in momentum

Extension = new length - original length

Energy per unit volume = ½ x stress x strain

Energy = (current) x (potential difference) x (time) = $(\text{curent})^2$ x (resistance) x (time)

Angular speed = (angle object turns through) / time

Kelvin = (degrees celsius) + 273

pV = constant, p is pressure and v is Volume (only valid if temperature is constant)

V / T = constant, V is volume and T is temperature (only valid if pressure is constant)

p / T = constant, p is pressure and T is temperature (only valid if volume is constant)

Work done = pressure x (change in volume)

(time period of orbit)^2 is directly proportional to (radius)^3

Escape velocity = square root of $(2GM / r)$, G = gravitational constant, M = mass of planet

For capacitor charging, $V = V_0(1 - e^{-t / RC})$

For capacitor charging, $I = I_0e^{-t / RC}$

For capacitor discharging (decay), $V = V_0e^{-t / RC}$

For capacitor discharging (decay), $I_0(1 - e^{-t / RC})$ ask about this as I'm not sure

$N = nN_A$, N is number of atoms, N_A is avogadro constant, n is the the number of moles

$A = A_0e^{-\lambda t}$, A is the activity, A_0 is the activity at t = 0

Average binding energy per nucleon = binding energy / nucleon number

$1/ f = 1/u + 1/v$, f is focal length, u is the object to lens, v is lens to image
(if v is negative then it is a virtual image)

Collecting power is directly proportional to (dish diameter)^2

Intensity = power / $(4 \times \pi \times d^2)$, d is the distance from star