

Electricity	<i>Basics</i>	$V = IR, V = I^2R$
		$P = VI, Js^{-1}$
	<i>Transformers</i>	$E = Pt = VIt = V \cdot \text{Coulombs transferred}$
Forces and Motion	<i>SUVAT</i>	$\frac{V_p}{V_s} = \frac{N_p}{N_s}$
		$V_p I_p = V_s I_s$
		$v = u + at$
		$v^2 = u^2 + 2as$
		$s = \left(\frac{u+v}{2}\right)t$
		$s = ut + \frac{1}{2}at^2$
	<i>Newton's Second Law</i>	$f = ma$
	<i>Momentum</i>	$\text{Momentum (kg ms}^{-1}\text{)} = \text{mass} \cdot \text{velocity}$
		$\text{change s}^{-1} = \frac{mv - mu}{t} = m(a) = \text{force}$
	<i>Weight</i>	$w = mg$
	<i>Work Done</i>	$WD = f \cdot d$
	<i>Power</i>	$P = \frac{WD}{\text{time}} = \text{Watts} = Js^{-1}$
	<i>GPE</i>	mgh
<i>KE</i>	$\frac{1}{2}mv^2$	
<i>Percentage efficiency</i>	$\frac{\text{useful output}}{\text{input}} \cdot 100\%$	
Thermal Physics	<i>Density</i>	$\frac{\text{Mass}}{\text{volume}} = \frac{kg}{m^3}$
Waves	<i>Wave Nature</i>	$v = f\lambda$
		$\text{Frequency (Hz)} = \frac{1}{\text{time for one oscillation}}$
		$E = hf$, where h is plank's constant ($6.63 \cdot 10^{-34}$)