Physics Equations Sheet
Physics (PH3)

$s = v \times t$	s distance v speed t time
refractive index $= \dfrac{\sin i}{\sin r}$	i angle of incidence r angle of refraction
magnification $= \dfrac{\text{image height}}{\text{object height}}$	
$P = \dfrac{1}{f}$	P power f focal length
refractive index $= \dfrac{1}{\sin c}$	**c critical angle** **(Higher Tier only)**
$T = \dfrac{1}{f}$	T periodic time f frequency
$M = F \times d$	M moment of the force F force d perpendicular distance from the line of action of the force to the pivot
$P = \dfrac{F}{A}$	P pressure F force A cross-sectional area
$\dfrac{V_p}{V_s} = \dfrac{n_p}{n_s}$	V_p potential difference across the primary coil V_s potential difference across the secondary coil n_p number of turns on the primary coil n_s number of turns on the secondary coil
$V_p \times I_p = V_s \times I_s$	V_p potential difference across the primary coil I_p current in the primary coil V_s potential difference across the secondary coil I_s current in the secondary coil