

Physics Equations Sheet

GCSE Further Additional Science/Physics (FAS3 and PH3)

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