Physics Equations Sheet

GCSE Combined Science: Trilogy (8464)
GCSE Combined Science: Synergy (8465)

1	(final velocity)^2 – (initial velocity)^2 = 2 × acceleration × distance	$v^2 - u^2 = 2\,a\,s$
2	elastic potential energy = 0.5 × spring constant × (extension)^2	$E_e = \frac{1}{2}\,k\,e^2$
3	change in thermal energy = mass × specific heat capacity × temperature change	$\Delta E = m\,c\,\Delta\theta$
4	$\text{period} = \frac{1}{\text{frequency}}$	$T = \frac{1}{f}$
5	**force on a conductor (at right angles to a magnetic field) carrying a current = magnetic flux density × current × length**	$\boldsymbol{F = B\,I\,l}$
6	thermal energy for a change of state = mass × specific latent heat	$E = m\,L$
7	**potential difference across primary coil × current in primary coil = potential difference across secondary coil × current in secondary coil**	$\boldsymbol{V_p\,I_p = V_s\,I_s}$

Higher Tier only equations are in **bold**.