

GCSE Combined Science: Trilogy Physics Equation sheet

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