INSTRUCTIONS
• Do not send this Data Sheet for marking; it should be retained in the centre or destroyed.

INFORMATION
• The information in this Data Sheet is for the use of candidates following GCSE (9–1) Combined Science B (Physics) (J260 03/07).
• This document consists of 2 pages.
Equations in physics

\[(\text{final speed})^2 - (\text{initial speed})^2 = 2 \times \text{acceleration} \times \text{distance}\]

\[\text{change in internal energy} = \text{mass} \times \text{specific heat capacity} \times \text{change in temperature}\]

\[\text{energy to cause a change of state} = \text{mass} \times \text{specific latent heat}\]

\[\text{energy stored in a stretched spring} = \frac{1}{2} \times \text{spring constant} \times (\text{extension})^2\]

\[\text{potential difference across primary coil} \times \text{current in primary coil} = \text{potential difference across secondary coil} \times \text{current in secondary coil}\]

**Higher tier only** –

\[\text{force} = \text{magnetic flux density} \times \text{current} \times \text{length of conductor}\]

\[\text{change in momentum} = \text{resultant force} \times \text{time for which it acts}\]