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 A (Physics) (J250 05/06/11/12).
• This document consists of 2 pages.
Equations in physics

(final velocity)$^2$ – (initial velocity)$^2$ = 2 × acceleration × distance

change in thermal energy = mass × specific heat capacity × change in temperature

thermal energy for a change in state = mass × specific latent heat

energy transferred in stretching = 0.5 × spring constant × (extension)$^2$

potential difference across primary coil × current in primary coil = potential difference across secondary coil × current in secondary coil

Higher tier only –

force on a conductor (at right angles to a magnetic field) carrying a current = magnetic field strength × current × length