



Oxford Cambridge and RSA

GCSE (9–1) Combined Science B (Twenty First Century Science)

J260 04/08

Data Sheet (Insert)

June 2019



INSTRUCTIONS

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INFORMATION

- The information in this Data Sheet is for the use of candidates following GCSE (9–1) Combined Science B (Combined Science) (J260 04/08).
- This document consists of **4** pages.

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Equations in physics

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

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

$$\text{energy for a change of state} = \text{mass} \times \text{specific latent heat}$$

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

$$\begin{aligned} \text{potential difference across primary coil} \times \text{current in primary coil} = \\ \text{potential difference across secondary coil} \times \text{current in secondary coil} \end{aligned}$$

Higher tier only –

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

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

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