



Oxford Cambridge and RSA

November 2020

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

J260 03/07

Data Sheet



INSTRUCTIONS

- Do **not** send this Data Sheet for marking. Keep it in the centre or recycle it.

INFORMATION

- This document has **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 –

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

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

OCR

Oxford Cambridge and RSA

Copyright Information

OCR is committed to seeking permission to reproduce all third-party content that it uses in its assessment materials. OCR has attempted to identify and contact all copyright holders whose work is used in this paper. To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced in the OCR Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download from our public website (www.ocr.org.uk) after the live examination series.

If OCR has unwittingly failed to correctly acknowledge or clear any third-party content in this assessment material, OCR will be happy to correct its mistake at the earliest possible opportunity.

For queries or further information please contact The OCR Copyright Team, The Triangle Building, Shaftesbury Road, Cambridge CB2 8EA.

OCR is part of the Cambridge Assessment Group; Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.