

**OXFORD CAMBRIDGE AND RSA EXAMINATIONS  
GCSE (9–1)  
J260 03/07  
COMBINED SCIENCE B  
(TWENTY FIRST CENTURY SCIENCE)  
PHYSICS  
Data Sheet (Insert)  
JUNE 2018  
MODIFIED ENLARGED 24pt**

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## **INFORMATION**

**The information in this Data Sheet is  
for the use of candidates following  
GCSE (9–1) Combined Science B (Physics)  
(J260 03/07).**



# 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

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

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

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