

**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**

**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 (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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