

## **GCSE Physics A (Gateway)**

**J249/01 Physics A** P1-P4 and P9 (Foundation Tier)

**Question Set 13** 

Draw the magnetic field pattern between the North and South poles of the magnets. 1 (a) Include arrows on your field lines. [3] (b) Describe **one difference** between a permanent magnet and an induced magnet. [1] (c) A student investigates solenoids and writes the following: Solenoids Solenoids are coils of wire. When a voltage flows through them a magnetic field is created. The magnetic field can be increased by decreasing the number of turns or by increasing the current. The student makes two mistakes.

[2]

## **Total Marks for Question Set 13: 6**

Put a ring around the **two** mistakes in the above box.



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