

GCSE Physics only

Foundation

Question	Answers	Extra information	Marks	AO / Spec ref.
01.1	E		1	AO1 P7.1.1
01.2	A, C		1	AO1 P7.1.1
01.3	B, D		1	AO1 P7.1.1
01.4	at least one line drawn above and below lines concentrated at poles arrows from N to S		1 1 1	AO1 P7.1.2
02	has its own magnetic field does not lose magnetism quickly made from steel	Penalise 1 mark for every extra box ticked, up to three boxes.	1 1 1	AO1 P7.1.1
03.1	Number of tacks		1	AO3 WS 2.2
03.2	The current		1	AO3 WS 2.2
03.3	Any one from: <ul style="list-style-type: none"> coil type of tacks soft iron core type of wire 		1	AO3 WS 2.2
03.4	Appropriate scale on axis Correctly plotted Straight line of best fit. Anomalous results excluded. Line passing through origin.		1 1 1 1 1	AO2 MS 4a, 4c
03.5	As the current increases, the number of tacks increases. They are directly proportional.		1 1	AO2 WS 3.5
03.6	Incorrect current setting		1	AO3 WS 3.7
03.7	Repeat the results		1	AO3 WS 1.6

AQA Physics P15 Electromagnetism

GCSE Exam-style mark scheme

Question	Answers	Extra information	Marks	AO / Spec ref.
03.8	0.08 A × 1000 = 80 mA 16 tacks	Accept 16 tacks with no working shown for 2 marks.	1 1	AO2 MS 1d
03.9	2 + 3 + 6 + 8 + 10 = 29 $\frac{6}{29} \times 100$ = 20.6897 = 21%	Accept 21% with no working shown for 4 marks.	1 1 1 1	AO1×1 AO2×3 MS 1c, 2a
04	An electromagnet will only pick up iron or steel cans. Aluminium cans are not magnetic. When the current is switched off the electromagnet ceases to be magnetic.		1 1 1	AO1 P7.2.1