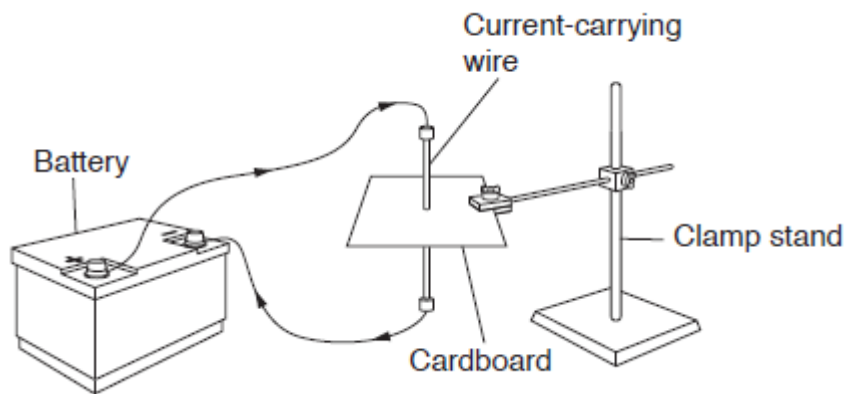


GCSE Physics A (Gateway)

J249/03 Physics A P1-P4 and P9 (Higher Tier)

Question Set 2

- 1 (a) A student sets up an experiment to investigate the magnetic field around a current-carrying wire.



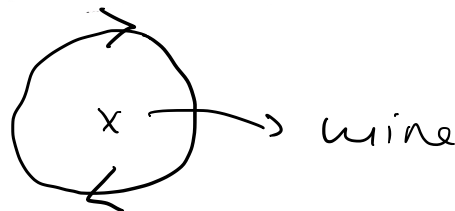
- (a) (i) Describe how the student could use this experiment and a compass to investigate the magnetic field produced by the wire.

[3]

Place the compass on to the card board and plot the direction of the needle. Repeat this in different positions around the wire

- (ii) Draw the shape of the field which would be found around **this** wire.

[2]



- (b) The behaviour of a magnetic compass is evidence that the core of the Earth is magnetic.

Explain why.

[2]

Always points to magnetic north and lines up with the magnetic field lines of the Earth.

Total Marks for Question Set 8: 7

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