

GCSE Physics B (Twenty First Century Science)
J259/03 Depth in physics (Higher Tier)

Question Set 20

1 Sarah experiments with magnets.

- (a) (i) Complete the diagram by drawing the pattern of magnetic field lines around the bar magnet.



- (ii) Describe where the magnetic field is strongest, and how this is shown by the field lines.

[2]

- (b) Sarah makes a needle for a compass.

She repeatedly moves the needle across the bar magnet until it is magnetised. She then suspends the needle from a thread and it points north.

[1]

Explain whether the compass needle is a permanent or induced magnet.

[2]

Total Marks for Question Set 20: 5

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