

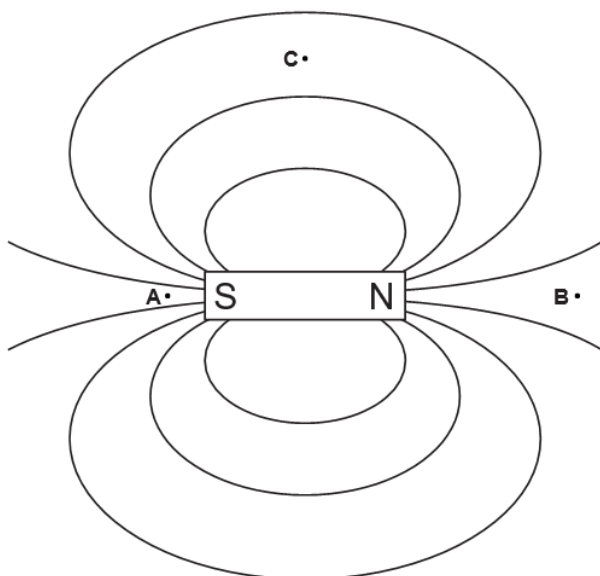
GCSE Physics B (Twenty First Century Science)
J259/01 Breadth in Physics (Foundation Tier)

Question Set 10

Multiple Choice Questions

1

The diagram shows the field around a bar magnet. Three points are labelled **A**, **B** and **C**.



- (a) (i) Where is the field strongest?
Tick (✓) **one** box.

| | |
|----------|--------------------------|
| A | <input type="checkbox"/> |
| B | <input type="checkbox"/> |
| C | <input type="checkbox"/> |

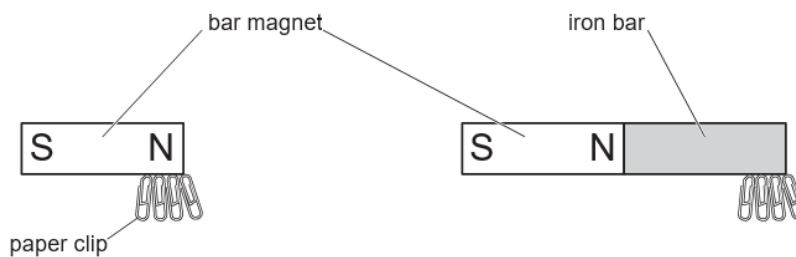
[1]

- (ii) Where would a magnetic compass point to the right?
Tick (✓) **two** boxes.

| | |
|----------|--------------------------|
| A | <input type="checkbox"/> |
| B | <input type="checkbox"/> |
| C | <input type="checkbox"/> |

[1]

- (b) The bar magnet can pick up paper clips.
An iron bar can also pick up paper clips if it is held next to a bar magnet.

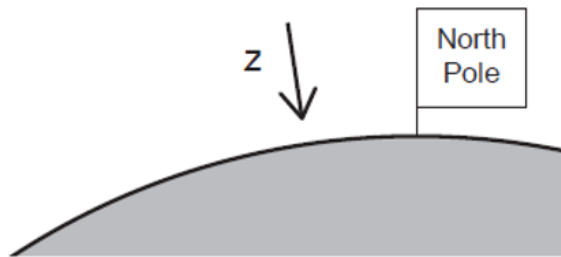


Describe the difference in magnetism between the bar magnet and the iron bar.

[1]

(c) The diagram shows a section through the Earth.

The flag marks the position of the geographic north pole of the Earth.
The arrow **Z** shows the point at which a compass needle would point vertically down at the surface.



Here are some statements about the Earth's magnetism, some are **true**, and some are **false**.

Put a **tick** (✓) in the correct box after each statement.

| | True | False |
|--|--------------------------|--------------------------|
| A compass will always point towards the centre of the Earth. | <input type="checkbox"/> | <input type="checkbox"/> |
| The Earth's magnetic north pole is in the same place as the Earth's geographic north pole. | <input type="checkbox"/> | <input type="checkbox"/> |
| The core of the Earth is magnetic and produces a magnetic field. | <input type="checkbox"/> | <input type="checkbox"/> |
| The compass points down because the surface at the north pole is covered with iron. | <input type="checkbox"/> | <input type="checkbox"/> |

[2]

Total Marks for Question Set 10: 5

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