

Edexcel IGCSE Physics

Chapter 6 - Magnetism and Electromagnetism

Practical Flashcards

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Investigate the magnetic field pattern for
a permanent bar magnet between two
bar magnets



Method 1: Iron filings



What equipment is needed?



What equipment is needed?

- Iron filings
 - Paper
- Bar magnets



Outline the method



Outline the method

1. Sprinkle iron filings onto a sheet of paper
2. Place the permanent bar magnet onto the paper
3. Add another magnet
4. Experiment with like and unlike poles facing each other



What will happen to the filings?



What will happen to the filings?

They should move into the shape of the magnetic field.



Method 2: Plotting Compasses



What equipment is needed?



What equipment is needed?

- Bar magnets
 - Paper
- Plotting compasses



Outline the method



Outline the method

1. Place the permanent bar magnet onto a plain piece of paper
2. Place a plotting compass somewhere on the page and draw an arrow in the direction the needle points
3. Move the compass and repeat
4. Join up the arrows



What will the diagram show?



What will the diagram show?

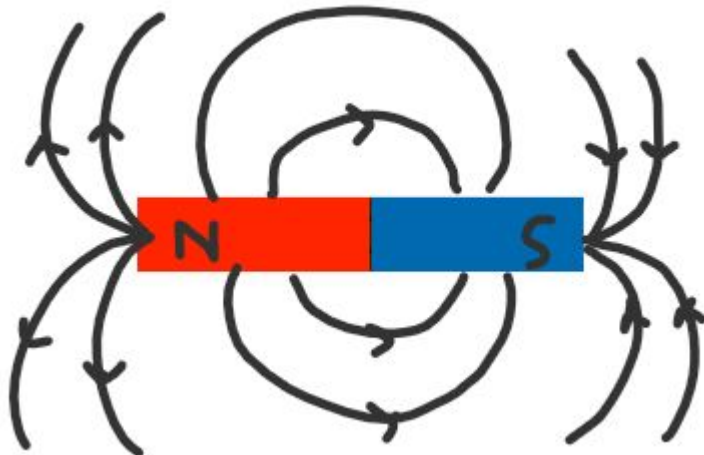
The magnetic field around the magnet.



What does the field look like around a
bar magnet?



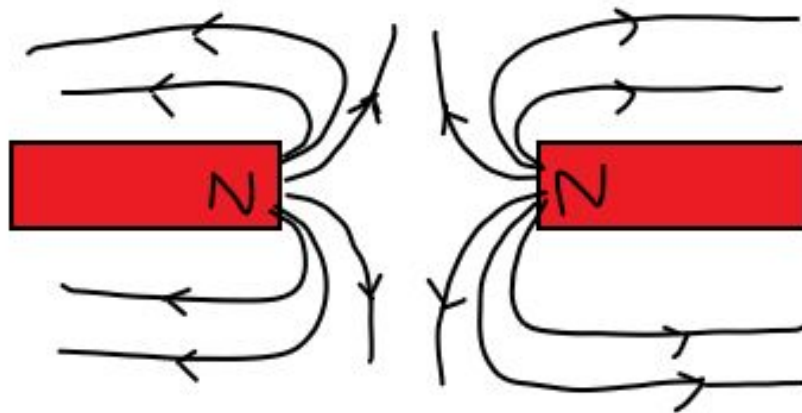
What does the magnetic field look like around a bar magnet?



What does the field look like between
like poles?



What does the field look like between like poles?



What does the field look like between unlike poles?



What does the field look like between unlike poles?

