

Magnetism

Chapter 10: Magnetism · Topic 1

Key Concept

Every magnet has a north and south pole, with like poles repelling and unlike poles attracting each other.

A magnetic field is the region around a magnet where its influence can be detected, often visualised using field lines.

The Earth itself acts like a giant magnet, with a magnetic field that a compass needle aligns with to point toward magnetic north.

Electromagnetism, the relationship between electricity and magnetism, is used in motors, generators, and many modern technologies.

Quick Revision Notes

- Every magnet has north and south poles.
- Like poles repel; unlike poles attract.
- A magnetic field surrounds a magnet.
- It's visualised using field lines.
- Earth acts like a giant magnet.
- A compass aligns with Earth's magnetic field.
- Electromagnetism relates electricity and magnetism.
- It's used in motors and generators.

Practice Questions

- 1 Test which objects a magnet attracts.
- 2 Discuss what happens when two magnets' like poles meet.
- 3 Research how a compass works.
- 4 Explain what a magnetic field is.
- 5 Research an electromagnetic device, like a motor.
- 6 Draw a magnet and its field lines.