

Types and Uses of Magnets

Chapter 4: Exploring Magnets · Topic 3

Key Concept

Magnets are used in a huge range of everyday devices: compasses use a small magnetic needle to show direction, refrigerator doors use magnetic strips to stay closed, and loudspeakers use magnets combined with electric current to produce sound vibrations. In industry, powerful electromagnets are used in cranes to lift and move heavy iron and steel scrap. Doctors also use magnetic technology in MRI (Magnetic Resonance Imaging) machines to take detailed pictures inside the human body without surgery.

Quick Revision Notes

- Common magnet shapes: bar, horseshoe, ring, and cylindrical magnets.
- Horseshoe magnets have poles close together, giving a stronger pull than a straight bar magnet.
- Everyday uses: compasses, refrigerator doors, loudspeakers.
- Industrial and medical uses: cranes (electromagnets), MRI machines.

Practice Questions

- 1 Name two everyday objects that use magnets.
- 2 Why might a horseshoe magnet be preferred over a bar magnet for lifting heavy objects?
- 3 Explain one medical use of magnets.