

Nova's Magnetic Mysteries: Year 5 Science Flashcards

Learning objective: To identify magnetic materials, understand magnetic poles, and describe the behaviour of magnetic forces.

Use these flashcards to test your knowledge of magnetism. Read the front, try to answer, then check the back to see if you have mastered the concept!

What is a magnetic field?	Name the two ends of a magnet.
An invisible area around a magnet where a magnetic force is exerted on other magnetic materials.	The North Pole and the South Pole.
What happens when two like poles (e.g., North and North) are brought together?	What happens when two opposite poles (North and South) are brought together?
They repel each other (push away).	They attract each other (pull together).
Which three common metals are attracted to magnets?	Is aluminium magnetic?
Iron, nickel, and cobalt.	No, aluminium is not a magnetic material.
What is a permanent magnet?	How can you demonstrate a magnetic field using iron filings?
An object made from a material that is magnetised and creates its own persistent magnetic field.	By sprinkling iron filings onto a piece of paper placed over a magnet; the filings align along the invisible field lines.
Explain why a magnet might pick up a steel paperclip but not a plastic button.	Define the term 'repulsion'.
Steel contains iron (a magnetic material), whereas plastic is non-magnetic and cannot be influenced by magnetic forces.	The force that pushes objects away from each other, occurring when two like magnetic poles meet.
What is the difference between a contact force and a non-contact force?	If a magnet is broken in half, what happens to the poles?
A contact force requires objects to touch, while a magnetic force is a non-contact force that can act at a distance.	Each new piece becomes a smaller magnet with its own North and South pole.