Nova’s Magnetic Mysteries: Year 4 Science Revision

Learning objective: To identify magnetic materials, understand magnetic poles, and explore the forces of attraction and repulsion.

Use these flashcards to test your knowledge of magnets. Read the term or question on the left, then flip to check the answer on the right. Discuss these with a partner to see if you can explain the 'why' behind the science.

What does it mean when two magnets 'attract' each other?	It means the magnets pull towards each other, usually because a North pole is near a South pole.
What happens when two identical poles (e.g., North and North) are placed near each other?	They repel, which means they push away from each other.
Name three materials that are magnetic.	Iron, steel, and nickel (or cobalt).
Where is the magnetic force the strongest on a bar magnet?	At the two poles (the ends of the magnet).
What is a magnetic field?	The invisible area around a magnet where its magnetic force can be felt or detected.
Are all metals magnetic? Explain why.	No, many metals like aluminium, copper, and gold are not magnetic. Only specific materials like iron and steel are magnetic.
What might happen if you cut a bar magnet in half?	You would end up with two smaller magnets, each having its own North and South pole.
Nova wants to find out if a wooden table is magnetic. How should she test this?	She should bring a magnet close to the table to see if it exerts a pull or force on the wood.
Why is steel often used to make magnets?	Steel is an alloy containing iron, which makes it a magnetic material that can be magnetised easily.
Justify why magnets are used on the doors of fridges.	Magnets are used because they attract the steel frame of the fridge, creating a secure, airtight seal that keeps the cold air inside.