

Science Topic: Forces and Magnets

Year 3 Spring 2



Prior Learning

In Years 1 and 2, we learnt that all objects are made from materials and we learnt to describe the properties of materials to show how they are different. We also learnt that when two materials move against each other, they create a force called friction.

What? (Key vocabulary)

Magnetism	An invisible, non-contact force that attracts magnetic metals, such as iron, cobalt, nickel and steel to magnets.
Magnetic Field	An area around a magnet where objects can be affected by its magnetic force.
Magnetic Poles	The ends of all magnets have a South and North pole and magnetic forces are the strongest here.
Core	The centre of Earth and other planets. The Earth's core is made of iron, which is magnetic, so the Earth has a North and South pole.
Resistance	The friction between two objects which slows the movement of one against the other.
Attraction	When two opposite magnetic forces pull towards each other, eg. a South and North magnetic pole will attract each other.
Repulsion	When two like magnetic forces push against each other, eg. two South poles or two North poles will always repel each other.
Acceleration	The process of a moving object speeding up.
Deceleration	The process of a moving object slowing down.
Elastic	A material property where an object which is stretched or pulled into a different shape can spring back into its original shape.

Who? (Significant people)

John McAdam	Researched how to make the surface of roads more smooth and effective for repeated, heavy traffic.
William Gilbert	The first British scientist to discover that the Earth has a magnetic core and that this is why magnetic compasses point North.