





Y3 Knowledge Organiser – Forces and Magnets

What should I Know by the end of the unit?

- Compare how things move on different surfaces.
- Notice that some forces need contact between two objects, but magnetic forces can act at a distance.
- Observe how magnets attract or repel each other and attract some materials and not others.
- Describe magnets as having two poles.
- Predict whether two magnets will attract or repel each other, depending on which poles are facing.

Magnetic	Non-magnetic X
	
These objects contain iron, nickel or cobalt. Not all metals are magnetic .	These objects do not contain iron, nickel or cobalt.

What should I already know how to do?

- Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.
- Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

Key Vocabulary

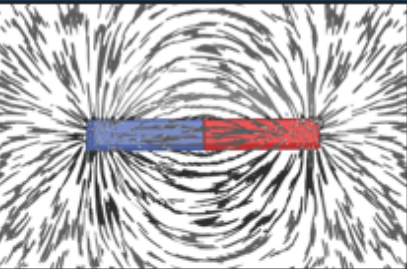
magnet	An object which produces a magnetic force that pulls certain objects towards it.
magnetic	Objects which are attracted to a magnet are magnetic. Objects containing iron, nickel or cobalt metals are magnetic.
magnetic field	The area around a magnet where there is a magnetic force which will pull magnetic objects towards the magnet.
poles	North and south poles are found at different ends of a magnet.



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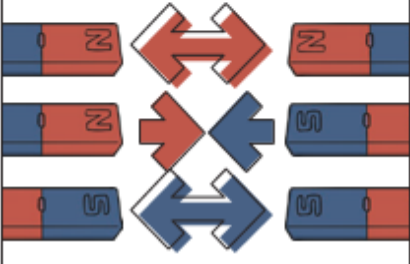
Key Knowledge



Like poles repel.
Opposite poles attract.



A magnetic field is invisible. You can see the magnetic field here though. This is what happens when iron filings are placed on top of a piece of paper with a magnet underneath.



The needle in a compass is a magnet. A compass always points north-south on Earth.

What should I already know how to do?

Key Vocabulary

Repel

Repulsion is a force that pushes objects away. For example, when a north pole is placed near the north pole of another magnet, the two poles repel (push away from each other).

attract

Attraction is a force that pulls objects together. For example, when a north pole is placed near the south pole of another magnet, the two poles attract (pull together).

Pre and Post Assessment		
Question	Pre Assessment response	Post Assessment response
<ul style="list-style-type: none">Compare how things move on different surfaces.		
<ul style="list-style-type: none">Notice that some forces need contact between two objects, but magnetic forces can act at a distance.		
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