

Y3/4 Science: Magnets (Y3)

What should I already know?

- The shape of some materials can be changed when they are stretched, twisted, bent and squashed.
- Know how different toys move.
- Know what a force is and be able to explain that a push and pull are types of forces.

South pole (S)

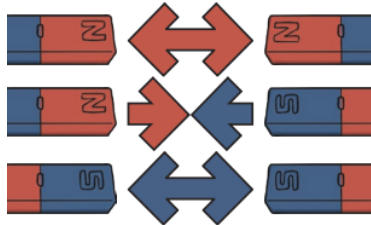
North pole (N)



Key Question: How can magnetism be used in our everyday lives?

Key learning

What happens when magnets are put together?



Like poles repel. Opposite poles attract.

N and N and S and S **repel** (move away from each other).
N and S **attract** (move towards each other).

What are magnetic materials?

Magnetic objects contain iron, nickel or cobalt. Not all metals are magnetic, for example, brass and aluminium are **NOT** magnetic.



Magnetic objects



Non-magnetic objects

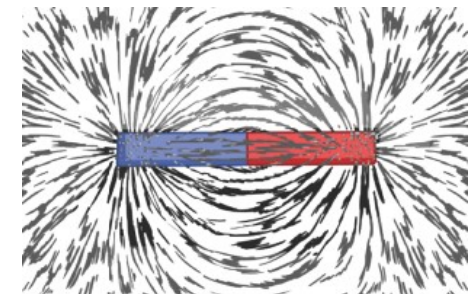


The needle in a compass is a magnet. A compass always points to North / South on Earth.

Vocabulary

attract	Attraction is a force that pulls objects together.
magnet	An object which produces a magnetic force that pulls certain objects towards it.
magnetic	Objects which are attracted to a magnet 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 the magnet.
repel	Repulsion is a force that pushes objects away.

What is a magnetic field?



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.