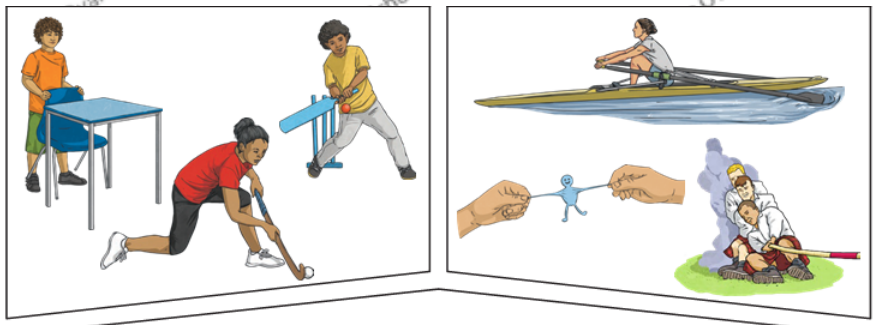
Y3 Forces and Magnets

Subject Specific Vocabulary

forces	Pushes or pulls
friction	A force that acts between two surfaces or objects that are moving, or trying to move, across each other.
surface	The top layer of something.

Key Knowledge

pushes **pulls**



Forces will change the motion of an object.
They will either make it start to move, speed up, slow it down or even make it stop.

Different **surfaces** create different amounts of **friction**. The amount of friction created by an object moving over a **surface** depends on the roughness of the **surface** and the object, and the **force** between them.

The driving **force** pushes the bicycle, making it move.

Friction pushes on the bicycle, slowing it down.

What do I already know?

I know the simple physical properties of everyday materials, e.g. hard/soft; stretchy/stiff; rough/smooth; bendy/not bendy (Y1)

smooth

rough

I know different everyday materials have a variety of uses

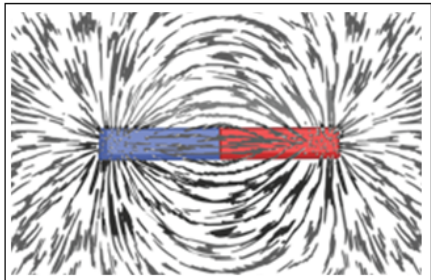
I know some materials can be changed by squashing, bending, twisting and stretching (Y2)

Y3 Forces and Magnets

Subject Specific Vocabulary

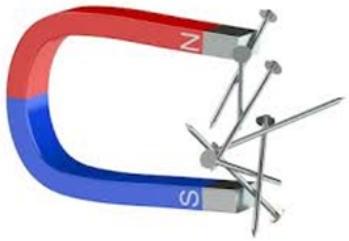
attract	To pull towards something e.g. when a north pole is placed near the south pole of another magnet, the two poles attract (pull together)
magnet	An object which produces a magnetic force that pulls certain objects towards it
magnetic	Objects which are attracted to a magnet are magnetic
magnetic 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 a magnet
repel	To push away from something, e.g. when a north pole is placed near the north pole of another magnet, the two poles repel (push away from each other)

Key Knowledge

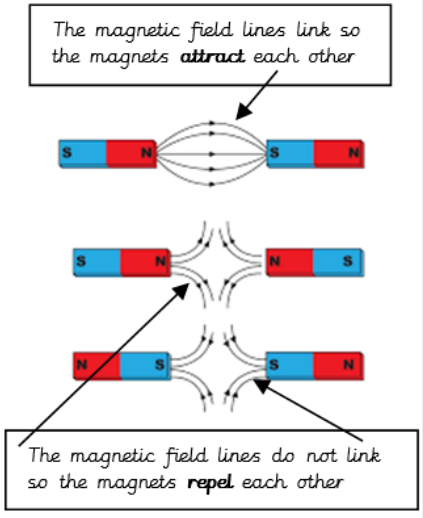


Magnets only attract certain types of metals such as iron, nickel and cobalt. However, most metals are not attracted to magnets, such as copper, silver, gold, magnesium, platinum and aluminium.

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.



Like **poles** repel
Opposite **poles** attract



Attraction is a **force** that pulls objects together.

Repulsion is a **force** that pushes objects away.