



Science Knowledge Organiser - Year 3 - Magnets and Forces

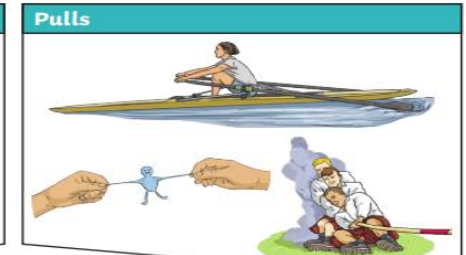
KEY VOCABULARY

Force-	A push or pull in a certain direction.
Friction-	A contact force that is caused by one object being pushed across the surface of another.
Contact Force-	A push or a pull that affects objects, which are touching.
Data-	Information collected, such as facts, information or numbers.
Prediction-	Using what you know to suggest what might happen in the future.
Smooth-	An even surface.
Rough-	An uneven surface.
Push-	To apply a force to try and move an object away
Pull-	To apply a force to try and move an object closer.
Magnet-	An object that can pull a magnetic material.
Magnetic-	Describes a material, which can be pulled by a magnet.
Poles-	The two ends of a magnet, known as the north pole (N) and south pole (S).
Repel-	A magnetic force that pushes two magnets apart.
Attract-	A magnetic force that pulls.

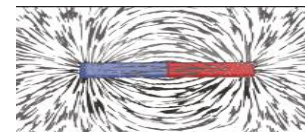
Different **surfaces** create different amounts of **friction**. The amount of **friction** created by an object moving over a **surface** depends on the roughness of the **surface** and the object, and the **force** between them.

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

Friction pushes on the bicycle, slowing it down.



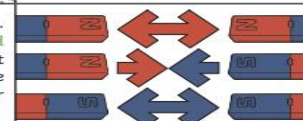
Forces will change the motion of an object. They will either make it start to move, speed up, slow it down or even make it stop.



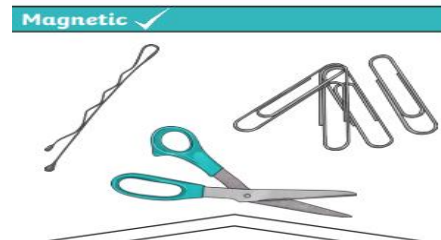
Like **poles** repel. Opposite **poles** attract.



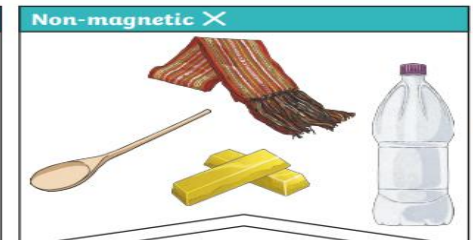
A **magnetic field** is invisible. You can see the **magnetic field** here though. This is what happens when iron filings are placed on top of a piece of paper with a **magnet** underneath.



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



These objects contain iron, nickel or cobalt. Not all metals are **magnetic**.



These objects do not contain iron, nickel or cobalt.