

Shadsworth Junior School Knowledge Organiser

Year Group: 3	Term: Summer 1	Subject: Science	Topic: Magnets
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Key Vocabulary

Forces — Pushes or Pulls
Friction — A force that acts between two surfaces or objects that or objects that are moving, or trying to move across each other.
Surface — The top layer of something.
Magnet —an object that produces a magnetic force that pulls certain objects towards it.
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. For example, when a north pole is placed near the north pole of another magnet the two poles repel (push away).
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.)

Key knowledge

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.

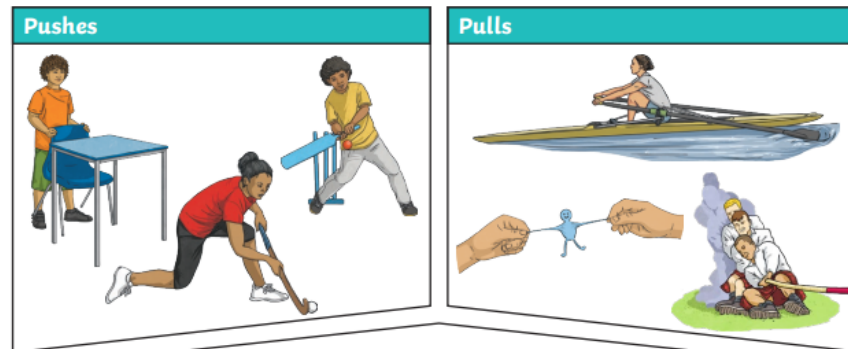
The driving **force** pushes the bicycle, making it move.



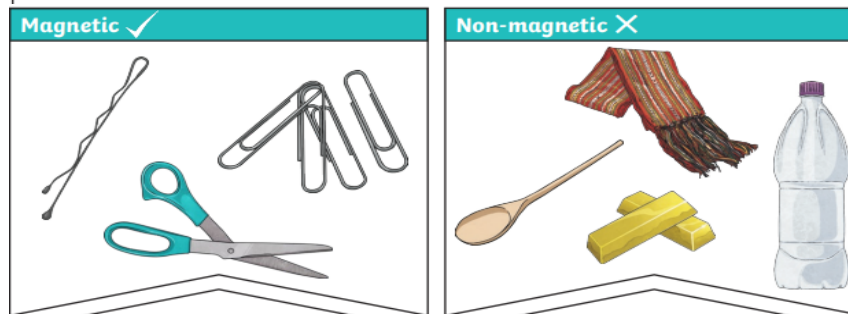
Friction pushes on the bicycle, slowing it down.



Useful Pictures and diagrams



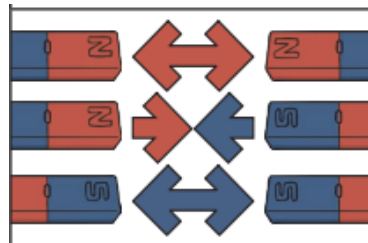
Forces will change the motion of an object. They will either make it start to move, speed up, slow it down or even make it stop.



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

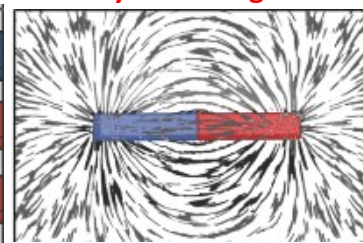
These objects do not contain iron, nickel or cobalt.

Key knowledge



Like poles **repel**.

Opposite poles **attract**.



A **magnetic field** is invisible. You can see a magnetic field here, with these iron filings.



The needle in a compass is a **magnet** and always points north-south.