

**Key Knowledge**

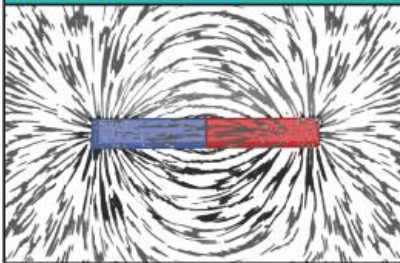
Different **surfaces** create different amounts of **friction**. The amount of **friction** created by an object moving over a **surface** depends on the roughness of the **surface** and the object, and the **force** between them.

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

**Friction** pushes on the bicycle, slowing it down.



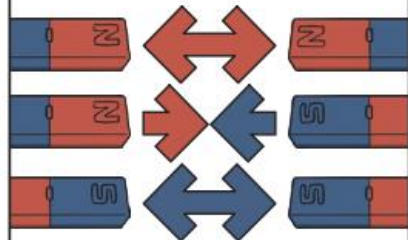
**Key Knowledge**



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.

Links to previous learning:

- Materials and their properties
- Electricity making switches

**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.

**Key Vocabulary**

force	a push or a pull
friction	a force that acts between 2 surfaces or objects that are moving, or trying to move, across each other.
surface	the top layer of something
gravity	a force that pulls towards the centre of the earth.
magnet	an object which produces a magnetic force that pulls certain objects towards it
magnetic	objects that are attracted to a magnet are magnetic. Objects such as iron, nickel, or cobalt metals are magnetic.
Magnetic field	The area around a magnet where there is a magnetic force. It will pull magnetic objects towards the magnet.
poles	North and South poles are found at opposite ends of a magnet.
repel	repulsion is a force that pushes objects away.
attract	attraction is a force that pulls objects together.