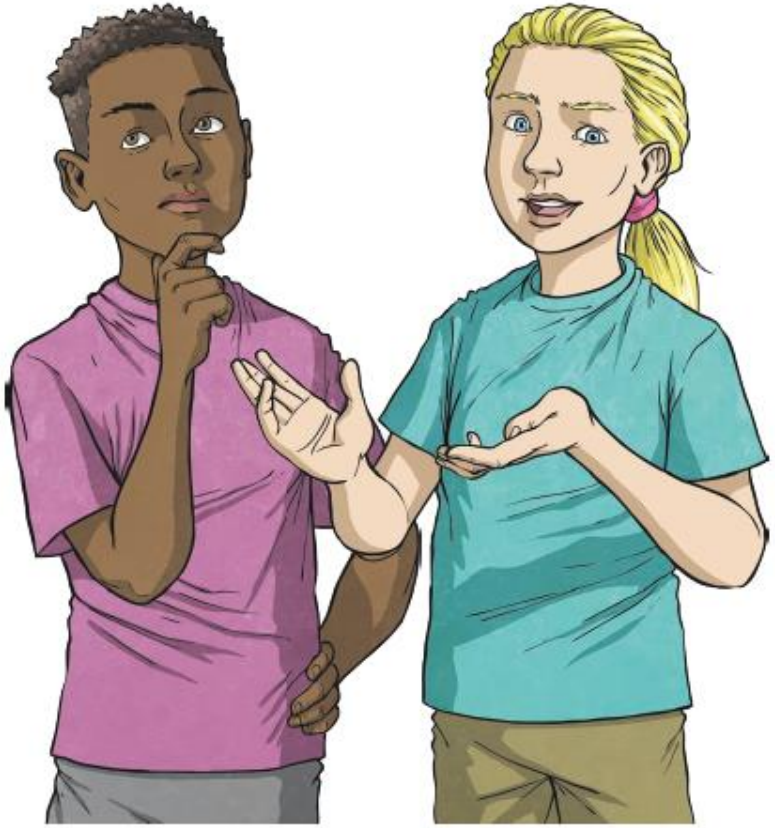
Key Vocabulary

Force
Push
Pull
Magnetic poles
North
South



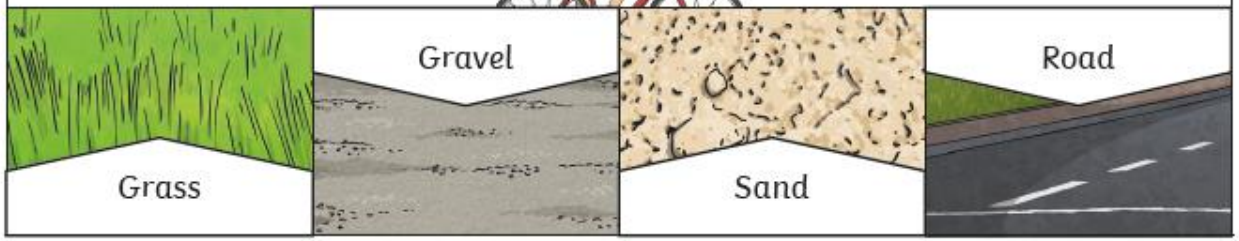
To look at all the planning resources linked to the Forces and Magnets unit, click here.

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.

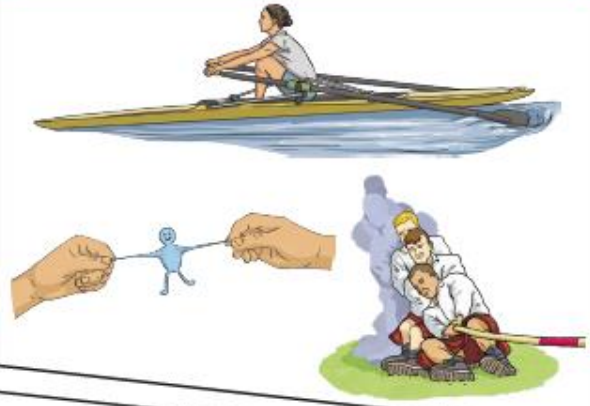
The driving **force** pushes the bicycle, making it move.

Friction pushes on the bicycle, slowing it down.



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.

Key Vocabulary

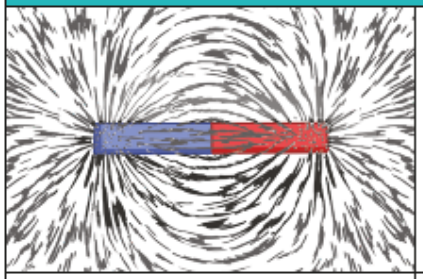
Surface
Magnet
Compare
Predict

Magnetic
Attract
Repel

Key Questions:

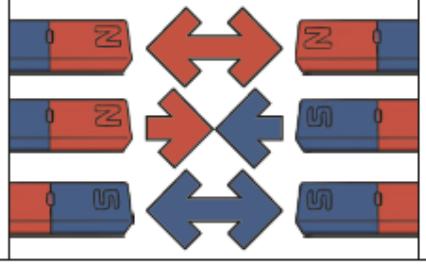
1. What is a force?
2. Can you explain how pushes and pulls work to make a swing move?
   Which direction do the forces act in?
3. Can you explain what a **forcemeter** does?
4. Why do magnets have two different ends?
5. Can you think of any materials that are magnetic (meaning they are attracted to magnets)?

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.

Magnetic ✓

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

Non-magnetic ✗

These objects do not contain iron, nickel or cobalt.