



Subject: Science

Topic: Forces and Magnets

Year: 3

Strand: Physics

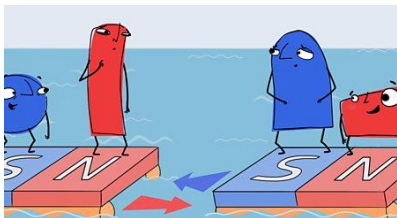
What should I already know?

- That the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching



What am I going to learn?

- 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.
- Forces will change the motion of an object.
- A magnetic field is invisible.
- Poles that are the same repel. Opposite poles attract.
- The needle in a compass is a magnet. A compass always points north-south onto Earth.
- Not all metals are magnetic.



Vocabulary

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)

Forces – Pushes or pulls.

Friction – A force that acts between two surfaces or objects that are moving or trying to move across each other.

Magnet – An object which produces a magnetic force that pulls certain objects towards it.

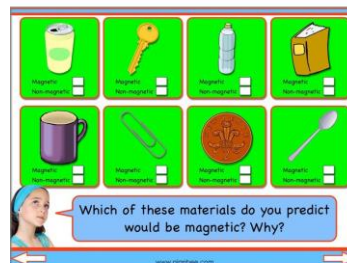
Magnetic – Objects which are attracted to a magnet are magnetic. Objects containing iron, nickel or cobalt metals are magnetic.

Magnetic field – The area around a magnet where this 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 – Repulsion is a force that pushes the objects away. For example when a north pole is placed near the north pole of another magnet, the two poles repel (push away from each other)

Surface – The top layer of something.



Investigations

- We will be investigating the strength of different magnets.
- We will be investigating the speed of a toy car over different surfaces.