

WHO?

Isaac Newton



Year 1 - materials

Physics



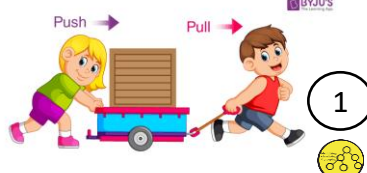
## Vocabulary

<b>force</b>	A push or a pull.	<b>magnetic field</b>	The area around a magnet where there is a magnetic force which will pull magnetic objects towards the magnet.
<b>friction</b>	A force that acts between two surfaces or objects that are moving, or trying to move, across each other.	<b>poles</b>	North and south poles are found at different ends of a magnet.
<b>surface</b>	The top layer of something.	<b>repel</b>	Repulsion is a force that pushes objects away.
<b>magnet</b>	An object which produces a magnetic force that pulls certain objects towards it.	<b>attract</b>	Attraction is a force that pulls objects together.

## WHAT?

Forces are pushes and pulls.

These pushes or pulls will always **change** the **motion** of an object. They will either make it **start to move** or **speed up**, **slow it down** or even make it **stop**.



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**Friction** is a **force** that holds back the movement of an object.

Friction acts in the **opposite direction** to the movement of the object.

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

The **friction** pushes on the bicycle, slowing it down.

**Magnetic** materials are **attracted** to magnets. This means the material will be **pulled** towards a magnet.

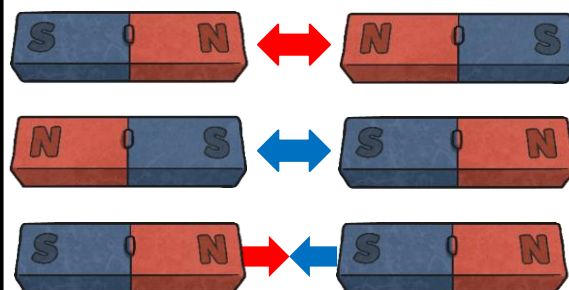
**Magnetic forces** can act at a distance.

**Non-magnetic** materials are **not attracted** to magnets. This means the material **will not** be pulled towards a magnet.

Not all metals are magnetic.



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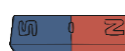
The **different** parts of a **magnet** are called the **poles**. There is a **north pole** and a **south pole**. On these bar magnets, the **blue end** is the **south pole** and the **red end** is the **north pole**. When two **north poles** or two **south poles** are placed near each other, you should feel them pushing away from each other – we say they are **repelling** each other.

When the **north pole** of one magnet and the **south pole** of another magnet are placed **near** each other, they pull together – we say they are **attracted** to each other.

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There are many **different** types of magnet.

Some magnets are **stronger** than others.



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