

Science Knowledge Organiser

Forces and Magnets (Term 5)

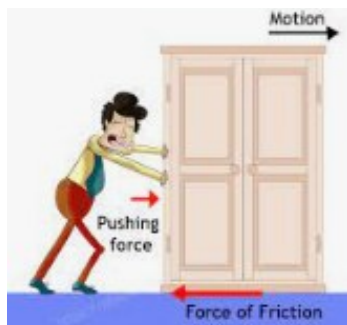
Year 3

Our learning

In our science lessons this term, we will be learning about forces and magnets. This is part of the **physics** aspect of science. Through our learning we will be considering the **cause and effect** of simple scientific processes.

We will learn about magnetism and other forces.

We will find out how magnets are used in everyday life.



Friction is a force that acts in the opposite direction.



Information

Friction is a force that acts between two objects that are moving and slows objects down.

Different types of surfaces create different amounts of friction. A smooth surface (such as ice) causes less friction than a rough surface like grass.

Pushes and pulls are types of forces. A pull is when you use force to move a thing (object) closer to you. A push is when you use force to move a thing (object) away from you.

A magnet has two poles called North and South and they are at opposite ends of a magnet.

A magnetic field (space where a magnetic force can be detected) is invisible.

All magnets are metals but not all metals are magnets.

Magnets are used in everyday life in things such as toys and jewellery, as well as in recycling centres.

All materials are either magnetic or non-magnetic.

As a scientist I will...

- Use ideas to pose questions independently about the world around me.
- Gather, record and use data in a variety of ways to answer a simple question.
- Make decisions about what to observe during an investigation.

Vocabulary

Magnet - A metal that attracts other metals

Magnetic materials - Materials that feel a force from a magnetic field

Forces - Pushes and pulls in different directions

Magnetic poles - The two ends of a magnet - North and South

Surface - The outside layer of an object

Attract - When certain metals are pulled in by the magnet's magnetic field. Magnets also attract one another, opposite pole to opposite pole (north and south).

Repel - To resist or push away. Magnets of the same pole (e.g. north and north) repel.

Magnetic objects

