



## Forces

Gravity – the force that pulls things to the ground. Gravity also holds Earth and other planets in their orbits around the sun.

Friction – friction is a force between 2 surfaces that are sliding or trying to slide across each other. Friction works in the opposite direction to which the object is moving. It slows down the moving object.

Smooth surfaces create less friction e.g. polished wood

Rough surfaces create more friction e.g. carpet

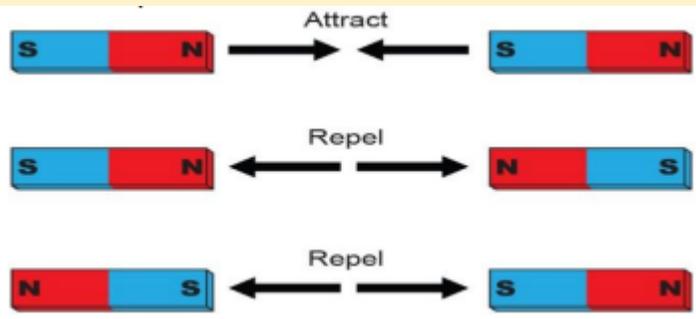
## What is magnets?

MAGNETS - are objects or materials that produce a magnetic field and attract or repel magnetic objects.

Magnets have 2 poles: north and south.

If you put magnets towards each other:

- 1 south pole and 1 north pole will attract
- 1 south pole and another south pole will repel
- 1 north pole and another north pole will repel



## Key Vocabulary

Force	a push, pull, twist or turn.
Gravity	a pushing force exerted by the Earth, it attracts objects towards the centre of the Earth.
Friction	the force between 2 moving surfaces.
Magnetism	the force of attraction and repelling caused by a magnet
Magnet	a material or object that produces a magnetic field, it attracts or repels magnetic objects
Poles	2 sides of a magnet where the magnetism is strongest
Attract	to pull towards (opposite of repel)
Repel	To push away (the opposite of attract)

## What I should know?

I can explore and describe how objects move on different surfaces.

I can explain how some forces require contact and some do not, giving examples.

I can explore and explain how objects attract and repel in relation to objects and other magnets.

I can predict whether objects will be magnetic and carry out an enquiry to test this out.

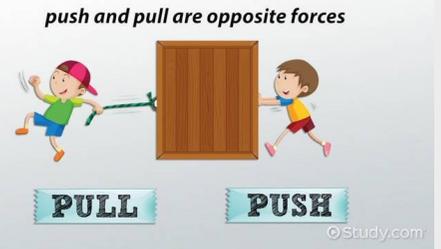
I can describe how magnets work.

I can predict whether magnets will attract or repel and give a reason.

## What is force?

A force is a **push or pull upon an object resulting from the object's interaction with another object.** Whenever there is an interaction between two objects, there is a force upon each of the objects.

### PUSH AND PULL FORCES



## What skills will I learn?

- I will learn how to ask relative questions.
- I will learn how to report on results.
- I will learn how to identify differences.

## MAGNETIC MATERIALS

Not all materials are magnetic. Some everyday materials which are magnetic are:

- Fridges
- Metal table legs at school
- Paper clips