

Forces and Magnets



Lesson 1: To explore what forces are.

Lesson 2: How do surfaces affect movement?

Lesson 3: Explore how magnetic forces work.

Lesson 4: Investigate magnetic materials.

Lesson 5: Investigate different uses for magnets.

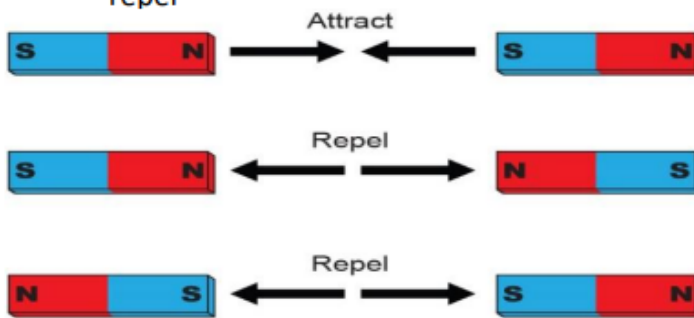
Lesson 6: Investigate different uses for magnets.

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

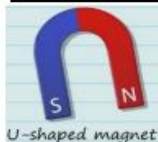
Magnets have 2 poles: north and south.

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



DIFFERENT TYPES OF MAGNETS



KEY VOCABULARY AND SPELLINGS

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)

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