

Year 3 Forces and Magnets

Prior Learning

EYFS - Understanding the world

- Pushing and pulling are types of force
- When something is dropped it falls to the ground because of gravity

Key Vocabulary

Cause and Effect: Something happening because a different thing prompted it to happen

Variation: A different or distinct version of something

Attract: Be drawn towards something.

Repel: Push away from something

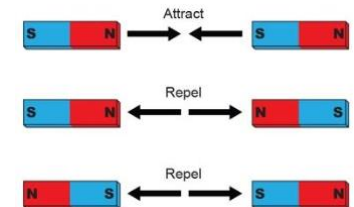
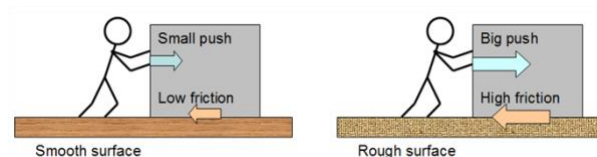
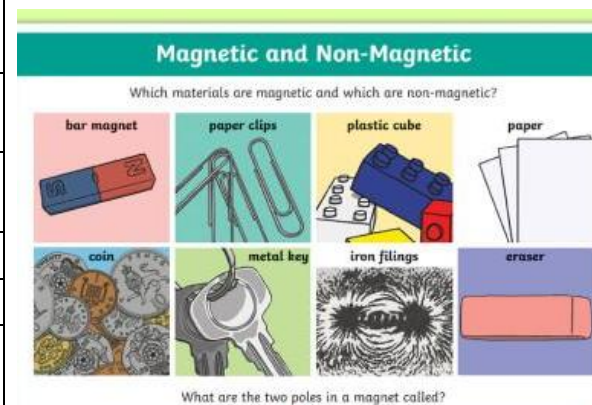
Magnetic Poles: North and South. Magnets also have a north and south side.

Metallic: Made of metal, or having metal characteristics

Key Facts

1. Same poles repel each other.
2. Opposite poles attract each other.
3. Some materials are attracted to magnets – magnetic.
4. Some metals are magnetic and some are nonmagnetic.
5. Magnets are a force that do not need contact.
6. Rough surfaces create more friction – smooth surfaces create less friction.

Images and Icons



Year 5 Forces

Prior Learning

Year 3 forces and magnets

- Magnetism is a force that pulls some metallic objects towards a magnet
- Magnets can act at a distance, but it is not due to a gravitational pull
- To push, pull or stop an object usually requires contact between objects or things. But magnets and gravity can act at a distance
- Objects move differently across different surfaces because of friction.
- Smooth surfaces cause less friction; rough surfaces cause more friction.

Key Vocabulary

Cause and Effect: Something happening because a different thing prompted it to happen

Variation: A different or distinct version of something

Gravity: A force that pulls objects towards large bodies like earth or the sun

Air resistance: A force that pushes against an object that travels through air

Mechanism: A part of a machine, like a gear, lever or pulley

Mass: A body of matter, or stuff with no definite shape

Key Facts

1) Gravity causes objects to fall towards the earth.

2) Gravity also causes the earth to orbit the sun

3) Isaac Newton developed the theory of gravitation in the 1600s. Before Newton, people didn't know why unsupported objects fell to the ground!

4) Friction between surfaces cause objects to slow down. If the surface is rough, able to will find it harder to travel across it,

5) Air resistance slows a parachute down as it travels through the air, whilst water resistance slows a boat down as it travels through water

6) Mechanisms allow you to transfer forces to make an action easier. For example, a crane uses a pulley to move large, heavy objects easier.

Images and Icons

