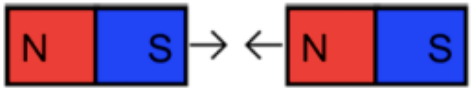
Holy Trinity Church of England Primary School

To be the best we can be: for God, for others and for ourselves

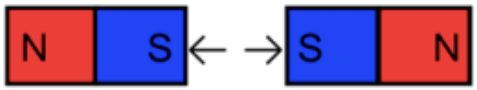
Year 3 – Forces

Key Vocabulary	Definition
Attract	To pull towards
Compass	A device for finding directions by means of a magnetic needle pointing to the magnetic north
Force	A push or pull
Friction	A force that acts when two objects touch each other. It's a contact force
Magnet	The pushing or pulling force that acts between two magnets or between a magnet and magnetic materials
Magnetic field	The area around a magnet in which there is magnetic force
Pole	The end of a magnet where the magnetic field is the strongest
Repel	To push backwards

Magnets

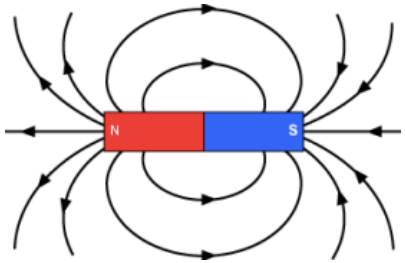


Opposite poles **attract**



Same poles **repel**

Magnetic field

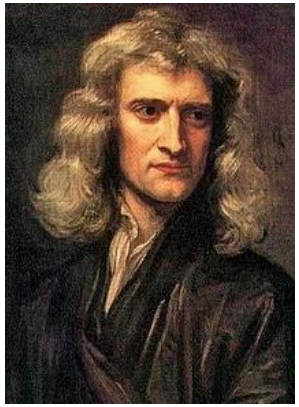


Compass

Sticky Knowledge

- That a force is a push or pull
- That a force can make things change shape
- There are forces that act between moving objects such as air resistance, water resistance and friction
- There are two magnetic poles: north seeking and south seeking poles
- The law of attraction: Opposite poles attract and same poles repel

Scientists Link



Issac Newton

6 hours

Lesson 1

Can I make observations of magnetic and non-magnetic materials?

Lesson 2

Can I group everyday materials on whether they are attracted to a magnet?

Lesson 3

Can I describe magnets having two poles?

Lesson 4

Can I compare how objects move on different surfaces?

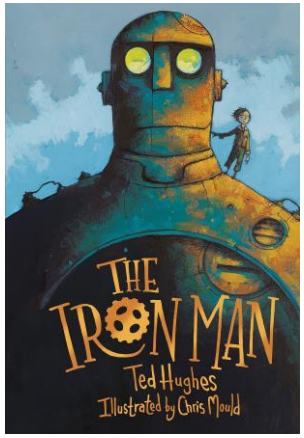
Lesson 5

Can I represent scientific findings in a table and a graph?

Lesson 6 (Extending writing opportunity)

Can I write a report about Isaac Newton?

Link to a text



Science skills

- Decide ways and give reasons for sorting, grouping, classifying, identifying things / objects, living things, processes or events based on specific characteristics.
- Ask questions such as 'What if we tried….? or 'What if we changed…?'
- Begin to understand that some questions can be tested in the classroom and some cannot.
- Within a group suggest questions that can be explored, observed, tested or investigated further.
- Within a group suggest relevant questions about what they observe and about the world around them.
- Act out or make a model of something to represent something in the real world using appropriate scientific vocabulary verbally.
- Help to decide about how to set up a simple **fair test** and begin to recognise when a test is not **fair**.
- Make a **prediction** based on everyday experience.
- Record and present findings using simple scientific language and vocabulary