

Knowledge Organiser

The Big Question: Are bigger magnets always stronger than smaller magnets?



Key Vocabulary



Lesson Sequence

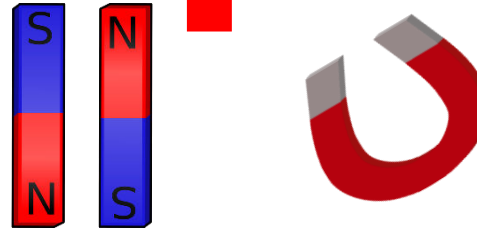
- Lesson 1 – To understand what forces are.
- Lesson 2 – To understand contact and non – contact forces.
- Lesson 3 – To know the features of a magnet and the effects of the two poles.
- Lesson 4 – To know which objects/materials are magnetic.
- Lesson 5 – To make systematic, careful observations and take accurate measurements.
- Lesson 6 – To draw simple conclusions from the experiment.

Prior Knowledge (references all facts children will need to access learning)

- Know what is sinking and floating.
- Know what materials sink and float
- Know different materials and their properties.
- Know what materials are made of.



Physics



Questions for experts

How can forces be measured?
What is the relationship between forces, mass and acceleration?

Trips and visits

We the curious – Forces and Magnets.

Where can this take you in the future?

Astronomer
Teacher
Research Scientist



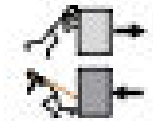
Working Scientifically Knowledge – Pattern Seeking

Pattern Seeking

Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers

Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions

Key vocabulary



force



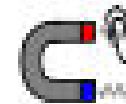
push



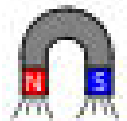
pull



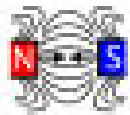
twist



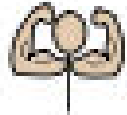
magnetic



magnet



attract



strength



repel



material



contact



force



non-contact



force



metal



iron



steel



poles



north pole



south pole