



Subject: Science

Year group: 3 Term: Spring 1

Title: Forces and Magnets

What should I already know?

- The name of a variety of everyday objects and what they are made from.
- The suitability of a variety of everyday objects.

Facts I will learn

- Smoother surfaces provide less friction compared to rougher surfaces.
- Magnetic forces can act without direct contact – compared to most other forces (e.g. pushing open a door).
- Magnets repel when two identical poles are facing each other and will attract when opposite poles are facing each other.
- Magnets only attract magnetic products (such as copper) but do not attract materials such as wood (which are not magnetic).

Key questions

- Why do some objects move differently on some surfaces?
- What is the difference between a magnetic force and other forces?
- Why do magnets attract and repel each other?
- What materials are attracted to magnets?
- How would I know if magnets would attract or repel each other?
- Are all magnets the same strength?

Key Skills.....

- Ask questions and find out the answer.
- Set up and carry out fair tests.
- Observe and take accurate measurements.
- Use mathematical graphs and charts (WS5)
- Give explanations for what I have seen.
- To work out why things are similar or different to each other.

Experiences that school will provide:

- Practical investigations, using magnets.
- Practical investigations, involving different materials.

Web links**Experiences that could be provided at home...****Key vocab****Definition**

Force	A push or a pull in a particular direction
Attract	An object pulled by a magnet
Repel	An object pushed by a magnet
Poles	Each side of the magnet (north and south)
Twist	To bend or turn an object in opposite directions
Push	When a force moves an object away from something
Pull	When a force moves an object towards something

https://www.stem.org.uk/resources/community/collection/12391/year-3-forces-and-magnets explorify.uk	• Using a toy car, push it across a variety of different surfaces (e.g. carpet, wood, plastic). Which material allowed it to move the easiest?	
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