



Curriculum

Year 3 Scheme of Work

Term: Autumn 2

Topic: Science – Magnets and Forces

Key Skills and Knowledge:

Forces and Magnets

- Compare how things move on different surfaces.
- Notice that some forces need contact between two objects, but magnetic forces can act at a distance.
- Observe how magnets attract or repel each other and attract some materials and not others.
- Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials.
- Describe magnets as having two poles.
- Predict whether two magnets will attract or repel each other, depending on which poles are facing

Working Scientifically

Pupils should set up a fair test and make systematic measurements and careful observations when comparing how things move on different materials.

Make predictions and use their results to draw simple conclusions as to what sort of materials are magnetic.

Reading and Writing Opportunities (Long and Short Activities)

Creative Ideas and Hooks

Children mime actions and other children are to say if it's a push or a pull force.
 Children to use the ramps to investigate how things move on different materials.
 Observe how magnets work at a distance.

Try magnets with different materials to identify which are magnetic. 'Maggie from magnetti.' Think about how this can be useful to know e.g. scrapyards, recycling
 Observe that opposite poles attract and like poles attract.

Links to PSHCE, Equality and British Values Work

Recycling
 Respect (for the environment and each other)
 Democracy when deciding how to set up a fair test.

Key Vocabulary:

Force, push, pull, friction, force, ramp, prediction, results, conclusion, material, magnet, magnetic, attract, repel
 magnetic field, poles, north, south.

Resources Available / Visits/Visitors

Magnets
 Ramps
 Cars
 rulers

Useful Websites:

[BBC Two - Science Clips, Magnets and Springs, Magnets and their invisible force](#)
[BBC Two - Science Clips, Magnets and Springs, How do magnets help in a scrapyards?](#)

Previous Knowledge:

Distinguish between an object and the material it is made from.
 Identify everyday materials e.g. wood, metal
 Describe the properties of everyday materials e.g. glass, wood, metal
 Group together materials based on their properties.

