



Edenfield C E Primary School

Medium Term Plan - Sequence and Progression

Subject: Science

Unit: Year 3 – Forces and Magnets

Key Vocabulary

- Move, movement: fly, bounce, slide, spin, roll, swirl, swing, forward, backward, upwards, downwards, faster, slower, accelerate, decelerate, ramp, incline.
- Push, pull, squeeze, springy, attract, repel, magnetic, non-magnetic, attraction, repulsion, names of common metals (e.g. iron, copper, aluminium), poles, horseshoe magnet, bar magnet, ring magnet, button magnet.
- Stronger / weaker, best / worse.

Lesson Sequence

1. To investigate how objects move- Test different objects and discuss which forces are in operation.
2. To compare friction on different surfaces – Test a toy car on different surfaces
3. To identify which materials are magnetic – Test which materials are magnetic
4. To compare and sort objects based on magnetism – Make predictions and test them.
5. To observe how magnets attract and repel – Predict which magnets will repel and attract
6. To identify how magnets are useful – Assessment task – design a new product that uses magnet
- 7.
- 8.
- 9.

By the end of the unit pupil will know:

- Compare how some 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 (*like and unlike poles*).
- Predict whether two magnets will attract or repel each other, depending on which poles are facing.

Skills

Working Scientifically

- Comparing how different things move and grouping them.
- Raising questions and carrying out tests to find out how far things move on different surfaces.
- Gathering and recording data to find answers to their questions.
- Exploring the strengths of different magnets and finding a fair way to compare them.
- Sorting materials into those that are magnetic and those that are not.
- Looking for patterns in the way that magnets behave in relation to each other and what might affect this, for example, the strength of the magnet or which pole faces another.
- Identifying how these properties make magnets useful in everyday items and suggesting creative uses for different magnets.