Key Vocabulary

air resistance

alloy

attract

balance

emboss

force

force meter

friction

gravity

lever

magnetic

magnetic pole

malleable

metal

mineral

motion

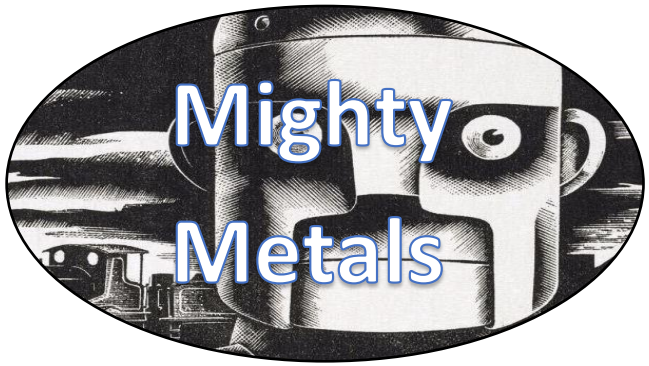
newton

pivot

push

pull

repel



Key questions for this area of learning:

What is a force?

What are the different types of forces?

Which metals are magnetic?

Key people studied:

Isaac Newton,

Clive Maddison & other metal sculptors

Visits, visitors or key events:

Visit to the local park

Home learning ideas/ places to visit:

Look at forces in everyday environment.

Science Key area of Learning:

Forces and Magnets

Science working scientifically skill development:

asking relevant questions and using different types of scientific enquiries to answer them

setting up simple practical enquiries, comparative and fair tests

making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment

recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables

reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions

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

identifying differences, similarities or changes related to simple scientific ideas and processes

using straightforward scientific evidence to answer questions or to support their findings.

Science knowledge and understanding:

Light

- recognise that they need light in order to see things and that dark is the absence of light
- notice that light is reflected from surfaces
- recognise that light from the sun can be dangerous and that there are ways to protect their eyes
- recognise that shadows are formed when the light from a light source is blocked by an opaque object
- find patterns in the way that the size of shadows change.

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.

Key areas of Maths Learning

Time

Angles

Lines and shape

Perimeter

Key areas of English learning:

Iron Man – Ted Hughes – fiction story

Girl and Robot

Poetry

Religious Education:

Worship and sacred places

Key question: Where, how and why do people worship?

An exploration of everyday worship in mosques and churches.

Geography:

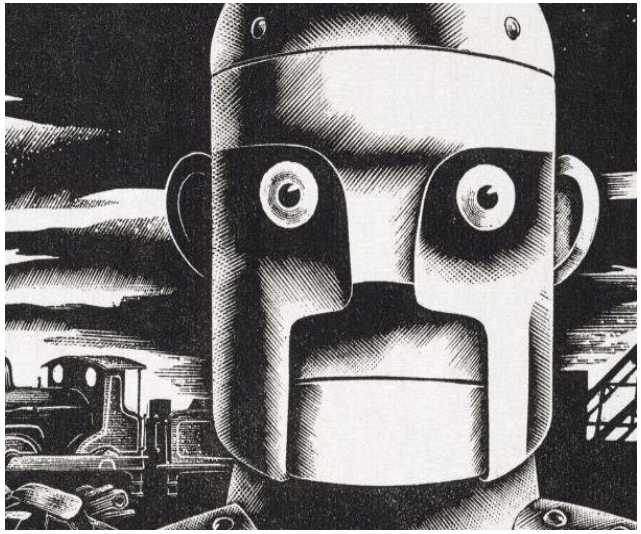
This is taught in other topics.

Citizenship/ PSHE:

Transition into Year 4.

Art and Design:

To improve their mastery of art and design techniques, including sculpture with a range of materials – metal trees based on the work of Clive Maddison.



History:

This is taught in other topics.

PE:

Athletics

Rounders

Preparation for Sports Day

Computing:

We are bug fixers:

-develop a number of strategies for finding errors in programs

-build up resilience and strategies for problem solving

Design and Technology – Kite project

Design- use research and develop design criteria to inform the design of a kite

Make- use tools and equipment to perform practical tasks [cutting, shaping, joining and finishing], accurately

Evaluate- understand how key events and individuals in design and technology have helped shape the world
- investigate and analyse a range of existing products

Technical Knowledge- apply their understanding of how to strengthen, stiffen and reinforce more complex structures

Carousel:

The children are taught RE, Drama and music by specialist teachers every week.

The drama is linked to the topic, where possible.