

## Science

Children will learn:

- how things move on different surfaces
- that some forces need contact between 2 objects, but magnetic forces can act at a distance.
- how magnets attract or repel each other and attract some materials and not others.
- about different everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials.
- How to describe magnets as having 2 poles.
- To predict whether two magnets will attract or repel each other, depending on which poles are facing.
- To use their scientific enquiry skills when setting up simple practical enquiries, comparative and fair tests.

## Art/DT

Children will:

- ⇒ research robots and use materials to design their very own robot made from recycled materials annotating to show how materials are attached.
- ⇒ Build their robot using a variety of materials.
- ⇒ Learn about some of the great artists in history and describe their work.
- ⇒ Experiment with different materials to create a range of effects and use these techniques in the completed piece

P.E: This half-term we will be working on our basketball skills in year 3. These include dribbling, throwing, chest passes, shooting, attacking and defending.

# Mighty Metals

You're an engineer, a scientist, a maker of men (iron men, of course). Explore the scientific world of forces and magnetism, metals and materials. Expand your mind as you test and trial, build and move. Which force is at play as you slide down a slide or swing on a swing? Can you explain why magnets repel and attract? Can you make a penny look shiny and new or build a steel band from pots and pans?



This half-term, children will be taking part in a robotics workshop where they will be building robots using LEGO® MINDSTORMS® and coding them using an easy-to-use graphical environment on laptops!

## English

This half-term, the children will be reading the book *The Iron Man* by Ted Hughes. The book tells the story of a mysterious iron giant whose destructive quest for food alarms the local farming community. The story is told through the eyes of a young boy, Hogarth, who forms a friendship with the Iron Man. In time the Iron Man turns from villain to hero as the world faces a bigger threat.

Whilst studying the book, the children will learn:

- \* To enjoy a story and discuss its meanings
- \* To explore narrative plots, settings, characters and draw inferences to aid understanding
- \* To broaden understanding of writers' use of language and build a varied vocabulary
- \* To write non-fiction texts based on fictional experiences
- \* To write newspaper reports based on the narrative.

## Maths

Children will cover the multiplication and division of 3, 4, 6 and 8. Pupils will then get to use their experience of multiplication and division to solve word problems.

Children will also begin to multiply  $TU \times U$ . Lessons move onto multiplying where regrouping is necessary, before pupils start to look at division. Decomposing numbers is critical in making both multiplication and division manageable for pupils and this is practised throughout the chapter. Once pupils master multiplication and division, they will then focus on solving problems using the multiplication and division methods taught.

# Home Learning

Use non-fiction books and the web to find out about a metal of your choice. Write down your findings as a list of facts.

Go on a magnetic treasure hunt in your house. How many magnetic objects can you find? What materials are they made from?

Search the web to find artwork made using metal and make a collage or scrap-book of downloaded images.

Investigate the best surfaces at home for toy cars to travel on: carpet or a tiled floor?

Have you read another fiction book about robots?

Read stories and poems about robots. Choose your favourite, then write or film a review for your classmates.

When a car moves downhill, Which force is acting to slow down and stop the car from moving?

If you had a robot suit, what features would you design it to have?