

## SCIENCE

### **FORCES**

Pupils should be taught to:

- explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object
- identify the effects of air resistance, water resistance and friction, that act between moving surfaces
- understand that force and motion can be transferred through mechanical devices such as gears, pulleys, levers and springs.

### **Working Scientifically**

- How does type of material/weight added/shape/ making holes affect the falling time of a parachute?
- How does moving the fulcrum on a lever affect the force needed to move an object?
- What factors affect the sag of a simple beam bridge?
- What affects the time of the swing of a pendulum?
- What affects the height bounced by a ball?
- What affects the time for different Plasticine shapes to fall in water?
- How does air resistance affect our ability to run?

### **Explore**

Falling paper cones or cup-cake cases.

### **Design and make**

A variety of parachutes and carrying out fair tests to determine which designs are the most effective.

### **Explore**

resistance in water by making and testing boats of different shapes.

### **Design and Make**

artefacts that use simple levers, pulleys, gears and/or springs and explore their effects.

### **Other teaching ideas**

Rolling the same ball or car down different steps

Make and discuss parachutes - what slows them down

Explore why racing cars and motorbikes are strange shapes.

Discussion about floating and sinking - what pulls things down and what pushes them up?

Discuss autogyros - what pulls them down what holds them up

Discuss paper aeroplanes - what makes them go, what makes them stop

Make a plasticine boat that will support 50g

## PHYSICAL EDUCATION

### **Hockey**

- Display an understanding of fair play, working well with others and leading a medium sized group
- Field, defend and attack tactically by anticipating the direction of play.
- Utilise new skills in competitive situations, as an individual or part of a team
- Utilise knowledge of technique to perform at an optimum level in different types of throw, jump and run

## COMPUTING

### **Coding**

- Designing and writing a program that accomplishes a specific goal. • Simulating a physical system.
- Introducing text variables.
- Creating and improving a game.

### **E-safety Sessions**

- Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration.
- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

# YEAR 5 SPRING 1

## A VICTORIOUS REVOLUTION

## ARTS

### **Art – Perspective – L.S. Lowry - Mills**

- Work from a variety of sources including observation, photographs and digital images.
- Work in a sustained and independent way to create a detailed drawing.
- Use dry media (chalk and charcoal) to make different marks, lines, patterns and shapes within a drawing.
- Begin to use simple perspective in their work using a single focal point and horizon.
- Begin to develop an awareness of composition, scale and proportion

### **Music – WOPs – Descant and Treble Recorders**

#### **Classroom -**

- Begin to recognise major and minor keys
- Use notation for crotchets, minims, semibreves and quavers
- Begin to recognise common time signatures
- Use strong contrasts in dynamics to add light and shade
- Alter tempi for mood effects
- Compare acoustic and electric sounds
- Develop an understanding of how chords can be used as an accompaniment
- *Recognise, sing and play a round*

## HUMANITIES

Settlement Anglo Saxons and Scots Various enquiries including;

- Who were the Scots and the Saxons?
- Where did they settle?
- What was it like to live in Anglo-Saxon England?
- How did Britain become Christian?
- Where were the women in Anglo Saxon Britain?

Local legacy. Using artefacts, timelines, art work and sources.

## FRENCH

### **Hobbies –**

- Introduce the vocabulary needed to talk about hobbies.
- Recap the use of ‘J’aime’ (I Like) followed by nouns and infinitives, and build on knowledge of negative sentences.
- Combine vocabulary from the unit, and recap days of the week for previous sessions.

By the end of the unit children should be able to:

- Express their likes and dislikes and use ‘tu’ to ask others for their opinions in a short conversation.
- Read the units story aloud and recognize and understand some of its key points without reading the English text.
- Be able to talk and write about what they and others do or like doing, giving more complex opinions when prompted.
- Recognise the difference between le/la and un/une in the context of the unit and apply then to nouns with little help.
- Understand and recognize some irregular plural nouns in French.