

## Science

### **Forces**

Pupils will learn about forces including gravity and friction before investigating how simple machines work.

NC Links:

- Explain that unsupported objects fall towards the Earth
- Identify the effects of air resistance, water resistance and friction
- Recognise that some mechanisms allow a smaller force to have a greater effect

### **Earth and Space**

Pupils will learn about space. Starting with the Solar System, they look next at how ideas about space have changed over time, before exploring what causes us to experience night and day on Earth.

NC Links:

- Describe the movement of the Earth, and other planets, relative to the Sun in the solar system
- Describe the movement of the Moon relative to the Earth
- Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.

## History

### **What impact did the Anglo-Saxons and Vikings have on Britain?**

Pupils will explore the world of the Anglo-Saxons, and why they came to Britain. They will gain an understanding of the struggle with the Vikings for the Kingdom of England

NC links:

- understand the history of Britain as a coherent and chronological narrative, from the earliest times to the present day.
- learn how Britain has influenced and been influenced by the wider world.
- understand historical concepts such as similarity, difference and significance, and use them to make connections, draw contrast and frame historically valid questions.

## Geography

### **Biomes/vegetation and trade routes**

Pupils will learn about the major biomes and the natural resources they can provide. They will find out about the UK's global trade links and investigate where products come from and the journey they take using maps. Pupils will research the pros and cons of buying local or imported goods.

NC links

- Describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.
- Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.

# Year 5 Spring

## Design and Technology

### **Structures**

Pupils will continue to develop their understanding of structures from the Anglo-Saxon era. Focusing on design and functionality.

NC links:

- how to make strong, stiff shell structures
- that materials have both functional properties and aesthetic qualities
- that materials can be combined and mixed to create more useful characteristics
- accurately measure, mark out, cut and shape materials and components
- accurately assemble, join and combine materials and components

## Computing

### **Formula One**

**Pupils will undertake a project based around formula one. They will design and code a game in Scratch, design and fabricate a model car using sketchup and silhouette, present and publish their work using Power point.**

## PSHE

### **Dreams and goals**

Pupils will explore different jobs and careers and gain an understanding of what they need to accomplish to achieve their dreams. They will develop an understanding of what motivates them and how peers can support each other.

### **Healthy Me**

Pupils will study the risks of alcohol and smoking. Pupils will reflect on their relationship with food and body image and gain an understanding of factors that can result in eating disorders.

## Art and Design

### **Wassily Kandinsky (abstract art)**

Pupils will study abstract art, focusing on line colour and shape. Pupils will study the works of Picasso, Miro and Pollock with a focus on Kandinsky's use of music as inspiration. Pupils will use Holst's "Planets Suite" to create Space themed abstract art.

NC links:

- improve their mastery of art and design techniques including sculpture with a range of materials
- evaluate and analyse creative works
- taught about great artists

## PE

### **Gymnastics**

**Children will:**

- **Develop flexibility, strength, technique, control and balance**
- **Compare performances with previous ones and demonstrate improvement to achieve their personal best**

## RE

### **Pilgrimages and holy places**

Children will learn about and compare the Pilgrimages of the six main religions. They will learn about holy places and the special event that happened there.

# Year 5 Spring

## English

This term, our Guided Reading book will be 'There's a Boy in the Girls' Bathroom' by Louis Sachar and our English book will be 'The Promise'.

## NC links

### Reading

- Continuing to read and discuss an increasingly wide range of fiction, poetry and non-fiction books
- Increasing familiarity with a wide range of books including myths, legends and traditional stories
- Making comparisons within and across books
- Checking the book makes sense to them by discussing their understanding
- Predicting what might happen from details stated and implied
- Participate in discussions about books that are read to them, building on their own and others' ideas and challenging views

### Writing

**Spelling** – continue to distinguish between homophones and other words which are often confused

Use dictionaries to check the spelling and meaning of words

**Handwriting and presentation** – write legibly and with increasing speed by deciding whether or not to join specific letters

**Composition** – plan writing by: identifying the audience and purpose for writing; noting and developing ideas; considering how authors have developed characters and settings. – draft and write by: in narratives, describing settings, characters and atmosphere; using further organisational and presentation devices to structure text and to guide the reader. – evaluate and edit by: assessing the effectiveness of their own and others' writing; proposing changes; proof read for spelling and punctuation errors.

### **Grammar, Vocabulary and punctuation**

Work on different word classes – nouns, adjectives, verbs, adverbs, prepositions, determiners

- Ensure the consistent and correct use of tense throughout a piece of writing
- Ensure correct subject and verb agreement when using singular and plural
- Using commas to clarify meaning or avoid ambiguity
- Punctuating bullet points clearly
- Using a colon to introduce a list
- Using brackets, dashes or commas to indicate parenthesis

## Mathematics

### **Fractions, percentages and decimals**

- compare and order fractions whose denominators are all multiples of the same number
- identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths
- recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements  $>1$  as a mixed number
- add and subtract fractions with the same denominator and denominators that are multiples of the same number
- multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams
- read and write decimal numbers as fractions
- recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents
- round decimals with two decimal places to the nearest whole number and to one decimal place
- read, write, order and compare numbers with up to three decimal places
- solve problems involving number up to three decimal places
- recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal

### **Measurements**

#### **Pupils should be taught to:**

- convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)
- understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints
- measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres
- calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm<sup>2</sup>) and square metres (m<sup>2</sup>) and estimate the area of irregular shapes
- estimate volume [for example, using 1 cm<sup>3</sup> blocks to build cuboids (including cubes)] and capacity [for example, using water]
- solve problems involving converting between units of time
- use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.