

## Science



### - Earth and Space:

#### National Curriculum Links:

Pupils should be taught to:

- 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 Earth
- Describe the Sun, Earth and Moon as approximately spherical bodies
- Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.

#### Learning Outcomes:

Children will be able to:

- To describe the Sun, Earth and Moon as approximately spherical bodies.
- Talk about the size of the Earth, Sun and Moon and how far away from each other they are.
- Use the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky.
- Use data to draw conclusions about the Sun at different times of the year.
- 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.

Educational Visit: Great North Museum

## History

### - Isaac Newton and Galileo Study:

#### Learning Outcomes:

Children will be able to:

- Explain who Isaac Newton and Galileo Galilei are
- Explain the work of Newton and Galileo in developing the theory of gravitation.
- Participate in a group discussion about the scientists and their impact within science today.
- Present their findings

## Mastering English

RE - Writing a compare and contrast text of different festivals within the Christian religion.

History - Create a presentation discussing the works of Newton and Galileo and their impact on science today.

## Design Technology

### - Sundials:

#### National Curriculum Links:

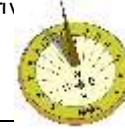
Pupils should be taught to:

- Use simple equipment and materials appropriately and take action to control risks.
- Evaluate their ideas and products against design criteria.
- Consider the view of others on how to improve their work.

#### Learning Outcomes:

Children will be able to:

- Explain what a sundial is and how it works
- Talk about the different types of sundials and how effective each are
- Design, make and evaluate their own sundials



## To Infinity and Beyond

## Topic-based English

- Recounts (Mars Evacuee / Space Hostage / Jedi Academy)

- Picture Book Adventures (Space Dog / Little Bell and the Moon)

- Slam Poetry (You wait till I'm older than you - Michael Rosen)

#### National Curriculum Links:

Pupils should be taught to:

- Continuing to read and discuss an increasingly wide range of genres.
- Develop positive attitudes to reading and understanding of what they read by increasing their familiarity with a range of books and text types
- Discuss the words that capture the readers interest
- Explain and discuss their understanding of what they have read
- Retrieve and record information from fiction and non-fiction books
- Identify the audience for and purpose of a piece of writing
- Plan, draft, write, evaluate and edit their written work
- Read aloud their own writing, using appropriate intonation and controlling the tone and volume so that the meaning is clear
- Increase the legibility, consistency and quality of their handwriting
- Proof read for spelling and punctuation errors

## Foreign Languages



### - French: French Songs

#### National Curriculum Links:

Pupils should be taught to:

- Listen attentively to spoken language and show understanding by joining in and responding
- Explore the patterns and sounds of language through songs and rhymes
- Read carefully and show understanding of words, phrases and simple writing
- Appreciate stories, songs, poems and rhymes in French

#### Learning Outcomes:

Children will be able to:

- Identify key words and phrases within French songs and translate meanings.
- Identify repetitive patterns in French songs.
- Learn and perform French songs.
- Make comparison and discuss what they liked and disliked about a range of French songs.

## Computing

### - Solar System Model / Presentation

(Scratch / Prezi)



#### National Curriculum Links:

Pupils should be taught to:

- Use search technologies effectively (IT), appreciate how results are selected and ranked (CS), and to be discerning in evaluating digital content (DL)
- Select, use and combine a variety of software on a range of digital devices to design and create a range of content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information (IT)

#### Learning Outcomes:

Children will be able to:

- Select an appropriate online or offline tool to create and share ideas (Prezi)
- Use text, photo, sound and video editing tools to in the presentation.
- Refine and edit their work independently.
- Use Scratch to programme Earth, Sun and Moon orbiting.

## PSHE

### - Relationships:

#### National Curriculum Links (PSHE Association):

Pupils should be taught about:

- **Healthy Relationships:** understanding what constitutes a healthy relationship; how actions and behaviour can affect relationships; boundaries within relationships; working together; conflict negotiation
- **Feelings and emotions:** recognising and responding to others' feelings; keeping a confidence or a secret; recognising and managing dares
- **Valuing differences:** Recognising stereotypes; different types of relationships; respecting similarities and differences; bullying and discrimination

## Music

### - Charanga and Recorder Tuition



#### National Curriculum Links:

Pupils should be taught to:

- Play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression
- Improvise and compose music for a range of purposes
- Use and understand staff and other musical notations
- Listen with attention to detail and recall sounds
- Appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians

## Religious Education

### - Christianity: Festivals

#### Learning Outcomes:

Children will:

- be able to talk about the events leading up to and taking place during different festivals and rites of passage;
- know how and why Christians celebrate these festivals and rites of passage

## Physical Education

### - Swimming

### - Dance

#### National Curriculum Links:

Pupils should be taught to:

- develop flexibility, strength, technique, control and balance
- compose and perform a dance using a range of movement patterns
- swim competently, confidently and proficiently over a distance
- use a range of strokes effectively



## Outdoor Learning Opportunities:

### Science - Earth and Space

- Investigating the movement of the sun throughout the day.
- Estimate the distance between the Earth and the Sun using a ratio of 1million km to 1m.
- Create a model of the solar system using natural material.

### DT - Sundials

- Using our sundials to investigate the Earth's rotation.
- Evaluating the effectiveness of sundials

## Mastering Maths

Earth and space: Make comparative measurements for the size of different planets, their distance apart, temperature...

Earth and Space: Directional-based challenges focusing upon the relative movement of Earth and the sun across the sky

Sundials: Directional-based challenges focusing upon the eight compass points

Sundials: Reading roman numerals displayed on sundials

## Maths

### National Curriculum Links:

#### Year 5 – Statistics, Multiplication & Division and Area & Perimeter (White Rose)

Pupils should be taught to:

- Solve comparison, sum and difference problems using information presented in a line graph.
- Complete, read and interpret information in tables including timetables.
- Multiply and divide numbers mentally drawing upon known facts.
- Multiply and divide whole numbers by 10, 100 and 1000.
- Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.
- Recognise and use square numbers and cube numbers and the notation for squared ( $^2$ ) and cubed ( $^3$ ) Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes.
- Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.
- Establish whether a number up to 100 is prime and recall prime numbers up to 19
- Measure and calculate the perimeter of composite rectilinear shapes in cm and m.
- Calculate and compare the area of rectangles (including squares), and including using standard units,  $\text{cm}^2$ ,  $\text{m}^2$  estimate the area of irregular shapes.

## Maths

### National Curriculum Links:

#### Year 6 – Fractions and Geometry (White Rose)

Pupils should be taught to:

- Use common factors to simplify fractions
- Use common multiples to express fractions in the same denomination.
- Compare and order fractions, including fractions  $> 1$
- Generate and describe linear number sequences (with fractions)
- Add and subtract fractions with different denominations and mixed numbers, using the concept of equivalent fractions.
- Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example  $14 \times 12 = 18$ ]
- Divide proper fractions by whole numbers [for example  $13 \div 2 = 16$ ]
- Associate a fraction with division and calculate decimal fraction equivalents [ for example, 0.375] for a simple fraction [for example 38]
- Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts
- Describe positions on the full coordinate grid (all four quadrants).
- Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.