### 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:

- Describe the Sun, Earth and Moon as approximately spherical bodies.
- Name and describe features of the planets in our Solar System.
- Order the planets in the Solar System.
- Explain how planets move in our Solar System.
- Use the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky.
- Investigate night and day in different parts of the Earth, reporting and presenting their findings.
- 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.

# Isaac Newton and Galileo Study Learning Outcomes

Children will be able to:

- Explain w ho Isaac New ton and Galileo Galilei are
- Explain the work of Newton and Galileo in developing the theory of gravitation

<u>Scientific Enquiry</u>: Does night and day occur at the same time everywhere on Earth?

Great North Museum Trip: Planetarium Visit and Space Workshop World Science Day - 10.11.22

# **Outdoor Learning Opportunities:**

### Science - Earth and Space

- Estimate the distance betw een the Earth and the Sun using a ratio of 1million km to 1m
- Create a model of the solar system using natural material

### **Design Technology**

### **Felt Phone Cases**

National Curriculum Links

Pupils should be taught to:

<u>Design:</u> Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams and computer-aided design.

<u>Make</u>: Select from and use a wider range of tools and equipment to perform practical tasks accurately

<u>Evaluate</u>: Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work

### Learning Outcomes

Children will be able to:

- use research to develop a design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups/
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional diagrams and prototypes.
- select from and use a wider range of materials and components, including textiles, according to their functional properties and aesthetic qualities in the context of selecting decorative techniques and fastenings for felt phone cases.
- evaluate their ideas and products against their own design criteria

# To Infinity and Beyond

## **PHRSE**

<u>Jigsaw - Celebrating Differences: Respect for similarity and difference. Anti-bullying and being unique</u>

#### **Learning Outcomes**

Children will:

- Understand there are different perceptions about what normal means
- Empathise with people who are different
- Understand that everyone has a right to be who they are
- Be aw are of their attitude tow ards people w ho are different to them
- Explain some of the ways in which one person or a group can have power over another
- Know how it can feel to be excluded or treated badly by being different in some way
- Know some of the reasons why people use bullying behaviours
- Know of a range of strategies to managing feelings in bullying situations and for problem-solving
- Give examples of people with disabilities who lead amazing lives
- Appreciate people for w ho they are
- Explain ways in which difference can be a source of conflict and a cause for celebration

Anti-bullying Week: Reach Out / Odd Sock Day - W.C 14.11.22

# Foreign Languages

### French: Christmas - L'arbre de Noel

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 rhy mes and link the spelling, sound and meaning of words Speak in sentences, using familiar v ocabulary , phrases and basic language structures

Develop accurate pronunciation and intonation so that others understand when they are

reading aloud or using familiar words and phrases\*

### **Learning Outcomes**

Children will be able to:

- Compare traditions from Britain and France.
- Recite a short text with accurate pronunciation
- Follow the transcript of a short story
- Learn and join in singing a French carol

# Computing

### Journey Through Space (Scratch)

#### **National Curriculum Links**

Pupils should be taught to:

Design, write and debug programs that accomplish specific goals.

Use sequence, selection and repetition in programs; work with variables and various forms and input and output.

Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.

#### Learning Outcomes

Children will be able to:

- Design and program a space game.
- Design a space themed character and a backdrop for a game.
- Add features or effects to enhance a game.
- Create an original animated game with a specific goal.
- I can program costume changes for a sprite.
- I can add point scoring and levels to game code.

CAD: SketchUp School to be used to support DT design w ork

### **Mastering Maths**

<u>Earth and space</u>: Make comparative measurements for the size of different planets, their distance from the Sun and other facts

# **Mastering English**

<u>Science</u> - Create an explanation text about New ton or Galileo and their discoveries



# Maths (Year 5)

### Multiplication & Division (A) and Fractions (A) (White Rose)

National Curriculum Links

Pupils should be taught to:

#### Multiplication and Division (A):

- Multiply and divide w hole 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) / cubed (3)
- Solve problems involving multiplication and division including using their know ledge of factors and multiples, squares and cubes.
- Know and use the vocabulary of prime numbers, prime factors and composite (non -prime) numbers.
- Establish w hether a number up to 100 is prime and recall prime numbers up to 19.

#### Fractions (A):

- 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.
- Compare and order fractions whose denominators are all multiples of the same number.
- Add and subtract fractions with the same denominator and denominators that are multiples of the same number.

# Maths (Year 6)

### Fractions and Converting Units (White Rose)

National Curriculum Links

Pupils should be taught to:

- 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
- $\hbox{-} \hbox{\it Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams}$
- Convert between different units of metric measure
- Understand and use approximate equivalences betw een metric units and common imperial units such as inches, pounds and pints

## **UK Parliament Week**

#### Making Laws and the role of Parliament

The children will:

- Understand the importance of having laws.
- Explain how law sare made
- Understand the role Parliament has in making laws.
- Explain the key terms associated with making laws.

# Geography



### **Aerial Maps From Space**

**National Curriculum Links** 

Pupils should be taught to:

- Describe and understand key aspects of human geography
- Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied

#### Learning Outcomes

Children will be able to:

- Use aerial photographs to recognise landmarks and basic human and physical features
- Recognise physical landmarks, both natural and man-made
- Identify hot and cold places and relate them to the poles and equator
- Land use and distribution of natural resources

### Music

### Music Tuition and Classroom Jazz (2) (Charanga)

**National Curriculum Links** 

Pupils should be taught to:

- Play and performin 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.
- 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.
- Use and understand staff notation.

#### Learning Outcomes:

Children will:

- Recognise some key features of the songs and understand where jazz music fits into the history of music.
- Identify the structure of jazz listen to (verse, chorus and bridge).
- Use the interrelated dimensions of music to talk about and compare two songs.
- Play and perform Bachrtach Anorak / Meet the Blues on the recorders (using the notes of the C major scale: C,D,E,F,G,A,B,C)
- Recognise the value of crotchet (1 beat), minum (2 beats) and semibreve (4 beats) notes and rests
- Create your own composition based on Meet the Blues using crochets, minums, and semibreves and up to five notes (C Bb, G, F C).

Larch Class Assembly / UKS2 Christingle Performances

# **Topic-based English**

### Recounts, narrative and Poetry (Cosmic It's one giant leap for boy-kind))

#### **National Curriculum Links**

Pupils should be taught to:

#### Spoken Language

- -ask relevant questions to extend their understanding and know ledge
- -use relevant strategies to build their vocabulary
- -maintain attention and participate actively in collaborative conversations, staying on topic and initiating and responding to comments.

#### Maintain positive attitudes to reading and understanding of what they read by:

- -continuing to read and discuss an increasingly wide range of fiction, poetry, plays, non-fiction and reference books or textbooks.
- -preparing poems and plays to read aloud and to perform, show ing understanding through intonation, tone and volume so that the meaning is clear to an audience

#### Understand what they read by:

- -asking questions to improve their understanding
- -summarising the main ideas drawn from more than one paragraph, identifying key details that support the main ideas
- -discuss and evaluate how authors use language, including figurative language, considering the impact on the reader **Writing Pupils should be taughtto:**
- -spell some words with 'silent' letters [for example, knight, psalm, solemn]
- -continue to distinguish between homophones and other words which are often confused

#### Draft and write by:

- noting and developing initial ideas, drawing on reading and research where necessary
- selecting appropriate grammar and vocabulary, understanding how such choices can change and enhance meaning
- -in w riting narratives, considering how authors have developed characters and settings in w hat pupils have read, listened to or seen performed
- describing settings, characters and atmosphere and integrating dialogue to convey character and advance the action

#### Evaluate and edit by:

- -proposing changes to vocabulary, grammar and punctuation to enhance effects and clarify meaning
- -ensuring the consistent and correct use of tense throughout a piece of writing

### Vocabulary, Grammar and Punctuation

- -using commas to clarify meaning or avoid ambiguity in writing
- -using brackets, dashes or commas to indicate parenthesis
- -using relative clauses beginning with who, which, where, when, whose, that or with an implied (i.e. omitted) relative pronoun
- -using expanded noun phrases to convey complicated information concisely

# **Core Books**

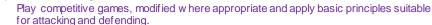
Cosmic- Frank Cottrell-Boyce A Rocket full of Space Poems-John Foster

### **Physical Education**

### NUF Football, Swimming or Multi-Skills



Pupils should be taught to:



- Take part in outdoor challenges both individually and within a team
- Compare their performances with previous ones and demonstrate improvement to achieve their personal best.
- Sw imcompetently, confidently and proficiently over a distance of at least 25m.
- Use a range of strokes effectively.
- Perform safe self-rescue in different water based situations.

# **Religious Education**

### **Christianity - The Significance of Christmas Celebrations**

#### **Learning Outcomes**

Children will:

- Describe some of the ways that Christians would celebrate Christmas
- Understand w hich of these would help them understand w ho Jesus was and why he w as horn
- Explain that people may celebrate Christmas in different ways and say whether or not I feel this relates to Jesus

P4C- Do Christmas celebrations and traditions help Christians understand who Jesus was and why he was born?

