

Year 5 Topic Overview Autumn Term 2023

Maths

Number and place value

- To read, write, round, order and compare numbers to 1,000,000 and determine the value of each digit.
- To interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers.
- To read Roman numerals to 1,000 and recognise years written in Roman numerals.

Addition and subtraction

- To add and subtract whole numbers with more than 4 digits using formal written method.
- To add and subtract numbers mentally with increasingly large numbers.
- To use rounding to check answers to calculations
- To solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.

Multiplication and division

- To identify multiples and factors, including finding all factor pairs of a number, and common factors of 2 numbers.
- To know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.
- To multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers.
- To divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context.
- To recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3).
- To solve problems involving multiplication and division

RE

Unit A: Creation

- To explore the story of creation and children reflect on their God given talents and living their lives in response to the teaching of Christ.

Unit B: Miracles & The Sacrament of the sick

- To learn about some of the miracles of Jesus and the work of the church to heal and care for the sick in Christ's name.

Unit C: Advent

- To link the Old Testament and the New Testament in terms of preparing for the coming of Christ during the season of Advent.

PSHE

PSHE scheme - Alive to the World

Topic (Geography) - Journeys

- To locate the world's countries
- Locate environmental regions, key physical and human characteristics, and major cities
- To understand geographical similarities and differences through the study of human and physical geography
- To develop geographical knowledge, understanding, and skills to enhance their locational and place knowledge

PE

- Swim competently, confidently and proficiently
- Use a range of strokes effectively
- Perform safe self-rescue in water

Journeys

Big Question:
Where am I?

Where are we going?

What has God given us?

Art

Retro-futurism

- To create sketch books to record observations and use them to review and revisit ideas
- Improve mastery of painting through colour mixing and brush techniques
- To learn about great artists and architects

DT

- To understand how key events and individuals in design and technology have helped to shape the world
- To become competent in joining fabrics using multiple techniques

English

Brightstorm by Vashti Hardy

- Describing settings, characters and atmosphere
 - Integrating dialogue to convey characters and advance the action
 - Predicting what might happen from detail stated and implied
- Spaced Out: Space Poems by Brian Moses and James Carter
- Preparing poems to read aloud using intonation and volume accurately
 - Selecting vocabulary to engage the reader
 - Considering the author's choice of language
- Race to the Pole by James Cracknell and Ben Fogle
- Using modal verbs or adverbs to indicate degrees of possibility
 - Assessing the effectiveness of their own and others' writing
 - Ensuring the consistent and correct use of tense
- Survivors by David Long
- Using 1st and 3rd person correctly
 - Using expanded noun phrases to convey complication information concisely
 - Summarising main ideas drawn from more than one paragraph

Computing

I23SOW

computing scheme

- Unit: Online Safety Presentation

Music

Strings taught by Music Specialist

- Play and perform musical instruments with accuracy, fluency, control and expression.
- Listen and recall sounds with increasing aural memory.
- Develop an understanding of the history of music.

Science

Working Scientifically (skills used throughout the units)

- To identify scientific evidence that has been used to support or refute ideas
- To report and present findings from enquires in oral and written forms
- To take measurements with increasing accuracy and precision

Earth and space

- To describe the movement of the Earth and other planets relative to the sun in the solar system.
- To describe the movement of the moon relative to the Earth.
- To describe the sun, Earth and moon as approximately spherical bodies.
- To use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.

Forces

- To explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.
- To identify the effects of air resistance, water resistance and friction, that act between moving surfaces.
- To recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect.

Knowledge Organiser Autumn Term 2023

<u>TOPIC</u>	<u>SCIENCE</u>	
<p><u>Key Vocabulary</u></p> <p>Journey Explorer Europe United Kingdom North and South America Human Geography Physical Geography Countries Major cities Maps Atlas Environmental regions Longitude Latitude Equator Biomes Climate zones</p>	<p><u>Key Vocabulary</u></p> <p>Space Earth Planets Sun Solar system Moon Orbit Spherical Rotation Mercury Venus Mars Saturn Uranus Neptune Pluto</p>	<p><u>Key Vocabulary</u></p> <p>Forces Gravity Air resistance Water resistance Friction Surfaces Levers Pulleys Gears</p>
<p>Star Questions- these are key things to think about.</p>		
<p>*Name countries in Europe.</p> <p>**Describe the position and significance of the Equator.</p> <p>***How can you use a map to locate a country or major city?</p> <p>**** What are the human and physical characteristics of the UK?</p> <p>*****Explain the similarities and differences of the UK, a European country and a North or South American country.</p>	<p>*Name the order of the Planets in our Solar system.</p> <p>**Describe the movement of the moon relative to the Earth.</p> <p>***What are the phases of the moon?</p> <p>****How do we get day and night?</p> <p>*****Explain how the sun moves across the sky.</p>	<p>*Name a type of force.</p> <p>**What do levers, pulleys and gears do?</p> <p>***How do unsupported objects fall towards the Earth?</p> <p>****Describe the forces acting on a hot air balloon.</p> <p>*****Explain the effects of air resistance, water resistance and friction, that act between moving surfaces.</p>

The questions are of increasing difficulty, encouraging pupils to be 'ambitious for the higher gifts'. The four and five star questions are designed to be open ended and rely on higher order thinking. Perhaps these questions could form the basis of discussions at home, as well revisiting key knowledge in the first three star questions.