Berkswell Church of England Primary School Curriculum Overview
Year 5 Spring Term – Where am I going?

English

Throughout this term children will complete reading and writing units on:

Unit 3 – Poetry with Attitude

This poetry unit helps pupils to appreciate the power of language to communicate feelings, emotions and viewpoints through the written word. Pupils experience how poetry can be a source of inspiration, imagination and consternation. The poems selected cover a range of poetry forms and topical themes, providing pupils with 'food' for thinking and discussion.

Curricular aims of this unit:

- To imagine and explore feelings, ideas and emotions, focusing on the creative use of language.
- To explore personal and collective responses to poetry
- To compare forms of poetry and techniques used for effect
- To explore how poets use language for comic and dramatic effect
- To recite some poetry for performance
- To write in response to issues raised

Unit 4 – Classic Literature - The Lion, the Witch and the Wardrobe

This unit focuses on the study of a classic novel, '*The Lion, the Witch and the Wardrobe'* by C.S Lewis. The book features in many lists of classic literature every primary pupil should read. The novel reflects the categories of the fantasy and adventure genres but there are aspects of fables and myths too. The story of four children, who discovered a new land at the back of a wardrobe, weaves drama, action and imagination for a satisfying read. The novel is multi-layered with many themes for pupils to explore such as friendship, betrayal, sacrifice, forgiveness, justice and loyalty.

Curricular aims of this unit:

- To read, explore and discuss more challenging texts
- To understand how literature can provide an insight into other worlds
- To explore character, motive and consequences in narrative
- To read text closely and refer to it when exploring ideas
- To read between the lines and find evidence for their interpretation
- To achieve an understanding of how the author uses characters' traits in the story for cause and effect
- To write reflectively about a text and its themes

Additionally, each class studies a class book during BREAK (Berkswell reads for Enjoyment and Knowledge) sessions. This term, children in Year 5 will be reading '**The Railway Children'**

The following will be taught and consolidated throughout Year 5:

Phonics and Spelling

- Spelling word list for Year 5
- Apply their growing knowledge of root words, prefixes and suffixes both to read aloud and to understand the meaning of new words that they meet.
- Verb prefixes [for example, *dis–*, *de–*, *mis–*, *over– and re–*]
- Suffixes - Endings which sound like /ʃəs/ spelt –cious or –tious, e.g. vicious, ambitious
- Suffixes - Endings which sound like /ʃəl/ -cial, e.g. official
- Converting nouns or adjectives into verbs using suffixes [for example, *–ate; –ise; –ify*]
- apply their growing knowledge of root words, prefixes and suffixes (morphology and etymology), both to read aloud and to understand the meaning of new words that they meet.

Grammar and Punctuation

- using expanded noun phrases to convey complicated information concisely
- using commas to clarify meaning or avoid ambiguity in writing
- using semi-colons, colons or dashes to mark boundaries between independent clauses
- Relative clauses beginning with *who*, *which*, *where*, *when*, *whose*, *that*, or an omitted relative pronoun
- Devices to build cohesion within a paragraph [for example, *then*, *after that*, *this*, *firstly*]
- Linking ideas across paragraphs using adverbials of time [for example, *later*], place [for example, *nearby*] and number [for example, *secondly*] or tense choices [for example, he *had* seen her before]

Handwriting

- write legibly, fluently and with increasing speed by:
- choosing which shape of a letter to use when given choices and deciding whether or not to join specific letters
- choosing the writing implement that is best suited for a task.

Maths

Number and place value

- solve number problems and practical problems that involve all of the objectives
- read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit
- count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000
- interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers through zero
- round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000
- read Roman numerals to 1000 (M) and recognise years written in Roman numerals.

Addition, subtraction, multiplication and division

- solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
- add and subtract whole numbers with more than 4 digits, including using efficient written methods (columnar addition and subtraction) DECIMALS
- add and subtract numbers mentally with increasingly large numbers
- use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy

Multiplication and division

- solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign
- identify multiples and factors, including finding all factor pairs
- solve problems involving multiplication and division where larger numbers are used by decomposing them into their factors
- 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
- multiply numbers up to 4 digits by a one- or two-digit number using an efficient written method, including long multiplication for two-digit numbers
- multiply and divide numbers mentally drawing upon known facts
- divide numbers up to 4 digits by a one-digit number using the efficient written method of short division and interpret remainders appropriately for the context
- multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
- recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)
- solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign
- solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.

Fractions and Decimals

- solve problems involving number up to three decimal places.
- read and write decimal numbers as fractions (e.g. 0.71 = 71/100)
- 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

Measures

- solve problems involving addition and subtraction of units of measure (e.g. mass/ weight, money) using decimal notation.
- convert between different units of measure (e.g kilogram and gram;)
- understand and use basic equivalences between metric and common imperial units and express them in approximate terms
- measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres
- recognise and estimate volume (e.g. using 1 cm3 blocks to build cubes and cuboids) and capacity (e.g. using water)
- solve problems involving converting between units of time

Geometry

- identify 3-D shapes, including cubes and cuboids, from 2-D representations
- know angles are measured in degrees; estimate and measure them and draw a given angle, writing its size in degrees (o)
- identify:
- multiples of 90o
- angles at a point on a straight line and ½ a turn (total 180o)
- angles at a point and one whole turn (total 360o)
- reflex angles, and compare different angles
- draw shapes using given dimensions and angles
- state and use the properties of a rectangle (including squares) to deduce related facts
- distinguish between regular and irregular polygons based on reasoning about equal sides and angles.
- identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.

Data

- solve comparison, sum and difference problems using information presented in line graphs
- complete, read and interpret information in tables, including timetables.

Science

Unit 3 Earth and Space

Pupils study our solar system, learning about the relative movements of the planets and the Moon and relating these to the way we experience the Sun and the Moon on Earth. They carry out some research into planets and investigate the way meteorites have shaped the surface of the Moon.

Key Concepts

- Stars, planets and moons are roughly spherical.
- In solar systems, planets orbit a star and moons orbit planets.
- Night and day are due to the rotation of the Earth about its axis.
- The phases of the Moon are the result of the shadow on the dark side of the Moon being visible in different proportions depending on where the Moon is in its orbit.

Developing scientific thinking

This unit supports the following elements in particular:

- reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations
- identifying scientific evidence that has been used to support or refute ideas or arguments.
- taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.

Unit 4 Mixtures and Reactions

After reviewing and extending their knowledge of materials from previous years, pupils study dissolving and learn how to recover materials from a solution. They look at other methods of separating mixtures and carry out an investigation on "sewage" to clean it up before discharge into a river. They investigate chemical reactions including burning and use a key and a series of simple tests to identify some mystery powders. They learn about reversible and irreversible changes and they create a drama about the life of a famous materials scientist.

Key Concepts

- The properties of materials include their chemical properties – solubility, type of reactions etc.
- These properties result in some mixtures being easily separated
- In a chemical reaction new substances are made.
- Most chemical reactions are not reversible.

Developing scientific thinking

- planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- using test results to make predictions to set up further comparative and fair tests
- reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations
- identifying scientific evidence that has been used to support or refute ideas or arguments.

Computing

We are artists:

The pupils use vector and turtle graphics to explore geometric art, taking inspiration from the work of Escher, Riley and traditional Islamic artists, as well as experimenting with complex 'fractal' landscapes.

We are crytptographers

The pupils learn more about communicating information securely through an introduction to cryptography (the science of keeping communication and information secret). They investigate early methods of communicating over distances, learn about two early ciphers, and consider what makes a secure password.

History

Britain's greatest inventions

The twentieth century was one of the most exciting and fast-moving centuries of all time with countless technological, social and political developments. These KS2 'Britain since 1948' lessons give your class a decade-by-decade look at the changes in Britain over this period, focusing on areas such as home life, work life, population, popular culture and technology.

- To identify some of the main changes in Britain since 1948 and to identify key characteristics of different decades.
- To identify similarities and differences between types of sources of information available in different periods in the past.
- To investigate what life was like in Britain during different decades.

Geography

During this term the children will embark on a Geography Week where they will be involved in a number of different Geography based activities.

RE

Islam

This strand is about:

The strand begins with a specific piece of Arabic Calligraphy, leads into discovery about its source, the sacred writing itself, and goes on to explore the life of Muhammad and the disciplined response to both by Muslims.

Questions to be raised:

- Who or what orders your life?
- What rules are important to you?
- What do you believe strongly about?
- What is God like? What is the value of religion?
- What do you really value about religion?
- What do you really value?

Reconciliation

This strand is about:

This strand being by looking at Jesus' suffering through the imagination and then visually through the stations of the cross. The themes of reconciliation and good overcoming suffering are shown in two contemporary examples.

Questions to be raised:

- Is there ever a positive outcome to suffering?
- Why did Jesus die?
- Why to people / should people what to remember horrible events?
- What do you think we can / should do to help people live in harmony?

Art

Sculpture

Children collect and record regular and more abstract sculptures and create scale models; maquette. They identify similarities and differences in their own and others' work. Children explore how shape, space, colour and texture can be used to make maquette. They develop on this knowledge to explore ideas about how to improve a public space. They evaluate by comparing and commenting on ideas.

D&T

Electrical Systems

Though this unit the children will explore different kinds of switches and circuits. They will research a range of products that respond to changes in the environment using a computer control program and investigate the ways in which different types of sensors and switches work. They will use this knowledge and understanding to design and make an alarm that will react to an external factor e.g. amount of light, heat, movement.

Music

Solar System

Embark on a musical journey through the solar system, exploring how our universe inspired composers including Claude Debussy, Gustav Holst and George Crumb. The children learn a song, and compose pieces linked to space.

Our Community

The song Jerusalem provides the basis for looking at changes through time. The children are given opportunities to compose and perform music inspired by their local community, both past and present

PE	PSD	MFL
The children will be taught a Real PE session each week which focuses on the development of the fundamental movement skills. During these sessions the children will be taught using a whole, part, whole method and will continually be able to practise their skills in a series of challenges and games. They will also take part in an additional skills application session each week where they will be able to puts their skills into practise. **Spring 1:** **Real PE** **Unit 3 Social Skills** The children will develop the following fundamental movement skills: **Physical Focus** – Dynamic Balance/Counter Balance in Pairs/Game Skills **Social Skills** – motivation/collaboration/negotiation/cooperation. During these sessions the additional ability focus will be cognitive skills. **Spring 2:** **Real PE** **Unit 4 – Applying Physical Skills** The children will develop the following fundamental movement skills: **Physical Focus** – Dynamic Balance to Agility/Static Balance/Game Skills **Applying Physical Skills** – perform a range of skills fluently, consistently and accurately and apply them to specific contexts During these sessions the additional ability focus will be creative skills. **Gym – Balance leading to change and direction** • To move into and from planned balances with an awareness of change of front • To identify and use variations in direction • Create a sequence with a partner on floor and apparatus to show change of front and direction • Observe and describe the movements of others using appropriate language	Children will explore the themes of: **Going for Goals** **Good to be me**	Children will explore the themes of: **Keep Fit** **Months of the Year** **Breakfast** **Desserts** **Easter**