Berkswell Church of England Primary School Curriculum Overview
Year 6 Autumn Term – 'Skating on Thin Ice'

English

Captain Scott
This unit explores reading and writing for different purposes from the perspective of a cross-curricular project on explorers. The national curriculum states that pupils should have opportunities to learn about significant people, past and present. In this unit, pupils study the life and work of Captain Robert Scott and his ill-fated expedition to the South Pole. Pupils will put themselves in the shoes of those on the expedition to gain an insight into exploration at this time and the hopes and dreams of Captain Scott and his team.

Curricular aims of this unit:
- To extend pupils' understanding of location and place knowledge
- To explore the interaction between human and physical landscapes
- To extend pupils' knowledge of the Antarctic environment
- To develop an understanding of the interconnectedness of our world
- To use dramatic conventions to explore challenges people faced in achieving their ambitions
- To explore sacrifices made by individuals for the good of others
- To work with multiple sources of more complex information
- To respond in a variety of imaginative and thoughtful ways to the learning contexts

Poetry: Stories For The Telling
This unit focuses on narrative poetry created by significant poets from our literary heritage. The selected poems are rich in composition, language and vocabulary for pupils to enjoy and explore. They cover a range of themes that challenge pupils to interpret character, motive and consequences at a more sophisticated level. Drama is used to support pupils to engage more deeply and thoughtfully with the content of the poems. The wonderful rhythmical qualities make the poems ideal for choral reading and performance.

Curricular aims of this unit:
- To become familiar with some classical narrative poetry
- To extend pupils' appreciation and understanding of poetry
- To respond imaginatively to the themes in narrative poetry
- To recognise and appreciate a wider range of literary devices
- To investigate how poetic language and features are used to build mood and suspense
- To express personal responses supported by text reference
- To read or recite poetry for performance
- To use the poems as a basis for imaginative and creative writing

The following will be taught and consolidated throughout the year:

- **Phonics and Spelling**
  - 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.
  - Spelling word list for Year 6

- **Grammar and Punctuation**
  - Recognising vocabulary and structures that are appropriate for formal speech and writing, including subjunctive forms
  - Using modal verbs or adverbs to indicate degrees of possibility
  - Using relative clauses beginning with who, which, where, when, whose, that
  - Learning the grammar for Year 6 in English Appendix 2 - Indicate grammatical and other features by:
  - Using commas to clarify meaning or avoid ambiguity in writing
  - Using brackets, dashes or commas to indicate parenthesis
  - Using semi-colons, colons or dashes to mark boundaries between independent clauses
  - Using a colon to introduce a list
  - Using hyphens to avoid ambiguity
  - Using passive verbs to affect the presentation of information in a sentence
  - Using the perfect form of verbs to mark relationships of time and cause
  - Use and understand the grammatical terminology in English Appendix 2 accurately and appropriately in discussing their writing and reading.
  - Terminology: modal verb, relative clause, parenthesis, bracket, dash, cohesion, ambiguity

- **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
  - **C**hoosing the writing implement that is best suited for a task.

Additionally, each class studies a class book during BREAK (Berkswell Reading for Enjoyment and Knowledge) sessions. This term, children in Year 6 will be reading **'Kensuke's Kingdom.**

Maths

Number and place value

- solve number problems and practical problems that involve all of the following objectives.
- read, write, order and compare numbers up to 10 000 000 and determine the value of each digit
- round any whole number to a required degree of accuracy
- use negative numbers in context, and calculate intervals across zero

Addition, subtraction, multiplication and division

- solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
- solve problems involving addition, subtraction, multiplication and division
- multiply multi-digit numbers up to 4 digits by a two-digit whole number using the efficient written method of long multiplication
- divide numbers up to 4 digits by a two-digit whole number using the efficient written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context
- divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context
- perform mental calculations, including with mixed operations and large numbers
- identify common factors, common multiples and prime numbers
- use their knowledge of the order of operations to carry out calculations involving the four operations
- use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy.

Statistics

- interpret and construct pie charts and line graphs and use these to solve problems
- calculate and interpret the mean as an average.

Algebra

- express missing number problems algebraically
- use simple formulae expressed in words
- generate and describe linear number sequences
- find pairs of numbers that satisfy number sentences involving two unknowns.

Fractions Decimals and Percentages

- use common factors to simplify fractions; use common multiples to express fractions in the same denomination
- compare and order fractions, including fractions >1
- associate a fraction with division to calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. 3/8)
- add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
- multiply simple pairs of proper fractions, writing the answer in its simplest form (e.g. $1/4 \times 1/2 = 1/8$)
- divide proper fractions by whole numbers (e.g. $1/3 \div 2 = 1/6$).

Measures

- solve problems involving the calculation and conversion of units of measure, using decimal notation to three decimal places where appropriate
- use, read, write and convert between standard units, converting measurements of length and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to three decimal places
- convert between miles and kilometres
- recognise that shapes with the same areas can have different perimeters and vice versa
- calculate the area of parallelograms and triangles
- recognise when it is possible to use the formulae for area and volume of shapes
- calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed (cm3) and cubic metres (m3) and extending to other units, such as mm3 and km3.

Geometry

- recognise, describe and build simple 3-D shapes, including making nets
- compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons
- illustrate and name parts of circles, including radius, diameter and circumference
- recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.
- 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.

Science

Heart and Lungs

Pupils study the circulatory system, learning about the basic components that make up blood, how the heart works and how blood circulates round the body. They learn about the lungs and the process of breathing and investigate the effect of exercise on the heart and breathing rates. They learn about the effects of smoking and alcohol.

Key Concepts

1. That the circulatory system transports blood round the body.
2. That the heart is the pump that keeps the blood flowing
3. That the lungs allow gas exchange to take place in the body with oxygen entering the body and carbon dioxide leaving it.
4. Oxygen is taken into the blood in the lungs and carried to parts of the body where it is needed.
5. That some substances and activities such as smoking are harmful to the body and should be avoided.

Developing scientific thinking

This unit supports the following elements in particular:

- taking measurements, using a range of scientific equipment, with increasing accuracy and precision
- recording data and results using tables and line graphs
- reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results

Unit 5 – Electricity

Pupils build on their learning from Year 4 to learn more about circuits, including how to use recognised symbols to represent circuits. They investigate how to change the amount of electricity flowing round a circuit, looking at how different components affect the flow of electricity and at the difference that the length and thickness of wires can make. They learn about series and parallel circuits and they use their knowledge of electricity to build games that use electric circuits.

Key Concepts

1. Circuits are a series of linked components that include an electricity supply.
2. Cells (batteries) are a store of energy that pushes electricity round a circuit. When the energy is gone, the cell no longer pushes out electricity.
3. More cells will push more electricity round a circuit.
4. Components in a circuit work harder when more electricity goes through them
5. Circuits can be represented by internationally recognised symbols.

Developing scientific thinking

This unit supports the following elements in particular:

- planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
- recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs

reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations ofand degree of trust in results, in oral and written forms such as displays and other presentations.

Computing

Coding

Key Learning:

- To design a playable game with a timer and a score.
- To plan and use selection and variables.
- To understand how the launch command works.
- To use functions and understand why they are useful.
- To understand how functions are created and called.
- To use flowcharts to create and debug code.
- To create a simulation of a room in which devices can be controlled.
- To understand how user input can be used in a program.
- To understand how 2Code can be used to make a text-adventure game.

Quizzing

Key Learning:

- To create a picture-based quiz for young children.
- To learn how to use the question types within 2Quiz.
- To explore the grammar quizzes.
- To make a quiz that requires the player to search a database.
- To make a quiz to test your teachers or parents.

Geography

- Locational geography
  - Locate countries in the Europe and the world using maps.
  - Identify the position and significance of the Prime/Greenwich Meridian and time zones (including day and night).
  - Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Artic and Antarctica Circle.
- Physical geography
  - Describe and understand key aspects of physical geography including climate zones, biomes, mountains and deserts.
- Geography skills
  - Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.
  - Use the eight points of a compass.

Music

Happy

All the learning in this unit is focused around one song:
Happy by Pharrell Williams - a Pop song with a Soul influence about being happy.

Classroom Jazz 2

All the learning in this unit is focused around two tunes: Bacharach Anorak and Meet The Blues.

The material presents an integrated approach to music where games, the dimensions of music (pulse, rhythm, pitch etc), singing and playing instruments are all linked.

PSHE- The Jigsaw Approach

Jigsaw brings together PSHE Education, emotional literacy, mindfulness, social skills and spiritual development. Jigsaw is designed as a whole school approach with all year groups working on the same theme (Puzzle) at the same time.

The children will cover two themes (puzzles) this term:

Being Me In My World

This covers a wide range of topics, including a sense of belonging, welcoming others and being part of a school community, a wider community, and a global community; it also looks at children's rights and responsibilities, working and socialising with others, and pupil voice.

Celebrating Difference

This focuses on similarities and differences and teaches about diversity, such as disability, racism, power, friendships, and conflict; children learn to accept everyone's right to 'difference', and most year groups explore the concept of 'normal'; bullying – what it is and what it isn't, including cyber and homophobic bullying – is an important aspect of this Puzzle.

Physical Education

The children will be taught a 'Real PE' session each week which focuses on the development of the fundamental movement skills. They will also take part in an additional skills application session each week where they will be able to puts their skills into practise.

Real PE - Unit 1

The children will develop the following fundamental movement skills:
Coordination – Ball Skills
Agility – Reaction/Response.
During these sessions the additional ability focus will be cognitive skills.

Gymnastics:

- Can perform complex shapes when performing sequences and skills with flexibility
- Perform more complex jumps, tuck, pike and leaps scissor kick and cat leap
- Side star roll, T-roll (with pointed toes), backwards roll. Perform more complex point and patches balances in a sequence on apparatus
- Perform a 'squat on and squat off 'apparatus with a run up (with or without a spring board)
- Perform a hurdle step on the floor/springboard and onto low apparatus

Real PE - Unit 2:

The children will develop the following fundamental movement skills:
Static balance – Seated.
Static balance – Floor Work
During these sessions the additional ability focus will be creative skills.

Indoor Athletics

French

Pupils will explore the theme of **School Life and Beyond**:

- Classroom Routines, Clothes, My Family, Occupation and gender, adjectives and adverbs, Christmas
- Pupils will reinforce and extend their skills in listening, speaking, reading (including phonics), writing and grammar

Religious Education

Christianity: Creation/Fall

Creation and Science: Conflicting or Complementary?

Through this unit children will be able to:

- Outline the importance of Creation on the timeline of the 'big story' of the Bible.
- Identify what type of text some Christians say Genesis 1 is, and its purpose.
- Taking account of the context, suggest what Genesis 1 might mean, and compare their ideas with ways in which Christians interpret it, showing awareness of different interpretations.
- Make clear connections between Genesis 1 and Christian belief about God as Creator.
- Show understanding of why many Christians find science and faith go together.
- Identify key ideas arising from their study of Genesis 1 and comment on how far these are helpful or inspiring, justifying their responses.
- Weigh up how far the Genesis 1 creation narrative is in conflict, or is complementary, with a scientific account.

Christianity: Incarnation

Was Jesus the Messiah?

Through this unit children will be able to:

- Explain the place of Incarnation and Messiah within the 'big story' of the Bible.
- Identify Gospel and prophecy texts, using technical terms.
- Explain connections between biblical texts, Incarnation and Messiah, using theological terms.
- Show how Christians put their beliefs about Jesus' Incarnation into practice in different ways in celebrating Christmas.
- Comment on how the idea that Jesus is the Messiah makes sense in the wider story of the Bible.
- Weigh up how far the idea that Jesus is the Messiah — a Saviour from God — is important in the world today and, if it is true, what difference that might make in people's lives.

Art

Photography – inspired by the work of Frank Hurley and William Grill.

The children will look at Hurley's work with particular focus on the use of light. They will take their own photographs and use these as a basis for their own piece. They will also look at Williams Grill's 'Shackleton's Journey' and see how he used light, shade and colour in his work.

Design Technology

Food – Celebrating Seasonality and Culture – Fruit Strudels/Mince Pies (sweet pastry treats)

- Understand that seasons may affect the food available, how food is processed into ingredients that can be eaten or used in cooking.
- Understand how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking.