



Year 6

Subject	Areas of Learning			
	 Number: Number & Place Value 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 solve number and practical problems that involve all of the above. 			
Maths	Number: Addition & Subtraction • solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why • perform mental calculations, including with mixed operations and large numbers • use their knowledge of the order of operations to carry out calculations involving the four operations • solve problems involving addition, subtraction, multiplication and division • use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.			
	Number: Multiplication & Division • multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication • divide numbers up to 4 digits by a two-digit whole number using the formal 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 numbers using the formal written divide numbers up to 4 digits by a two digit numbers using the formal written.			
	 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 identify common factors, common multiples and prime numbers 			





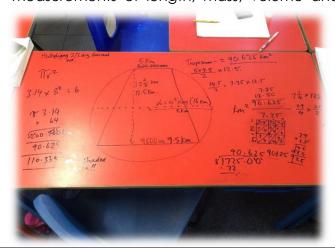
- perform mental calculations, including with mixed operations and large numbers
- use their knowledge of the order of operations to carry out calculations involving the four operations
- solve problems involving addition, subtraction, multiplication and division
- use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.

Number: Fractions

- use common factors to simplify fractions; use common multiples to express fractions in the same denomination
- compare and order fractions, including fractions > 1
- 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 [for example, $1/4 \times 1/2 = 1/8$]
- divide proper fractions by whole numbers [for example, 1/3 of 2 = 1/6]
- associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 3/8]
- identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places
- multiply one-digit numbers with up to two decimal places by whole numbers.
- use written division methods in cases where the answer has up to two decimal places
- solve problems which require answers to be rounded to specified degrees of accuracy
- recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.

Measurement

- solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate
- use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of



measure to a larger unit, and vice versa, using decimal notation to up to three decimal places

• convert between miles and kilometres







- recognise that shapes with the same areas can have different perimeters and vice versa
- recognise when it is possible to use formulae for area and volume of shapes
- calculate the area of parallelograms and triangles
- calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm³) and cubic metres (m³), and extending to other units [for example, mm³ and km³].

Geometry: Properties of Shapes

- draw 2-D shapes using given dimensions and angles
- 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 and know that the diameter is twice the radius
- recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.

Geometry: Position & Direction

- 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.

Statistics

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

Ratio & Proportion

- solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts
- solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison
- solve problems involving similar shapes where the scale factor is known or can be found
- solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.







Algebra

- use simple formulae
- generate and describe linear number sequences
- express missing number problems algebraically
- find pairs of numbers that satisfy an equation with two unknowns
- calculate possibilities of combinations of two variables.
- Find the value of a term

Speaking and Listening

The Spoken Language objectives are set out for the whole of primary school, and teachers will cover many of them every year as children's spoken



language skills develop. In Years 5 and 6, some focuses may include:

- Speak clearly in a range of contexts, using Standard English where appropriate
- Monitor the reactions of listeners and react accordingly
- Consider different viewpoints, listening to others and responding with relevant views
- Use appropriate language, tone and vocabulary for

different purposes

Reading Skills

- Read a wide range of fiction, non-fiction, poetry, plays and reference books (including being read to).
- Learn a range of poetry by heart.
- Perform plays and poems using tone, volume and intonation to convey meaning.
- Use knowledge of spelling patterns and related words to read aloud and understand new words.
- Make comparisons between different books, or parts of the same book.

English





- Read a range of modern fiction, classic fiction and books from other cultures and traditions.
- Identify and discuss themes and conventions across a wide range of writing.
- Discuss understanding of texts, including exploring the meaning of words in context.
- Ask questions to improve understanding of texts.
- Summarise ideas drawn from more than one paragraph, identifying key details.
- Predict future events from details either written in a text or by 'reading between the lines'.
- Identify how language, structure and presentation contribute to meaning.
- Discuss how authors use language, including figurative language, to affect the reader.
- Make book recommendations, giving reasons for choices.
- Participate in discussions about books, building on and challenging ideas.
- Explain and discuss understanding of reading.
- Participate in formal presentations and debates about reading.
- Provide reasoned justifications for views Writing Skills
- Write with increasing speed, maintaining legibility and style.
- Spell some words with silent letters, such as knight and solemn.
- Recognise and use spellings for homophones and other often-confused words from the Y5/6 list.
- Use a dictionary to check spelling and meaning.
- Identify the audience and purpose before writing, and adapt accordingly.
- Select appropriate grammar and vocabulary to change or enhance meaning.
- Develop setting, atmosphere and character, including through dialogue.
- Write a summary of longer passages of writing.
- Use a range of cohesive devices.

(Cohesive devices are words or phrases used to link different parts of writing together. These may be pronouns such as 'he' or 'it' to avoid repeating a name, or phrases such as 'After that...' or 'Meanwhile' to guide the reader through the text).

- Use advanced organisational and presentational devices, such as bullet points.
- Use the correct tense consistently throughout a piece of writing.
- Ensure correct subject and verb agreement.
- Perform compositions using appropriate intonation, volume and movement.
- Use a thesaurus.
- Use expanded noun phrases to convey complicated information concisely.
- Use modal verbs or adverbs to indicate degrees of possibility.
- Use relative clauses.
- Recognise vocabulary and structures that are appropriate for formal use.
- Use passive verbs to affect the presentation of information.
- Use the perfect form of verbs to mark relationships of time and cause.
- Recognise the difference in informal and formal language.
- Use grammatical connections and adverbials for cohesion.
- Use ellipses, commas, brackets and dashes in writing.
- Use hyphens to avoid ambiguity.





- Use semi-colons, colons and dashes between independent clauses.
- Use a colon to introduce a list.
- Punctuate bullet points consistently.



Writing genres covered:

Fiction	Non-Fiction		Poetry		
*Story writing (categories include: stories with social dilemmas; mystery stories; stories with multi-climaxes etc.); *descriptive settings; *Play scripts; *Shakespeare plays and poetry/ sonnets.	*Non-chronological reports e.g. information about alpacas; *Chronological reports, e.g. science investigation; *Recounts; *Journalistic writing e.g. newspaper articles; * Balanced arguments/ discussions; *Biographies; *Persuasive writing e.g. adverts etc. *Letter writing e.g. letter of complaint etc.	an po ev *D (In fro	range of rhyming ad non-rhyming betry e.g. descriptive betry based on WWII ent etc. escriptive settings; spired by poetry om a range of poets we today and roughout history).		





World War II - 1939-1945



In Year 6, we cover two history topics: World War II and the Tudors. These are often taught in a cross-curricular way through other subjects, for example English, R.E., Geography, music etc. Our WWII program of study focusses on:

countries and key individuals involved; • to recall key dates

• the

 to recall key dates and details about key events;



- describe what evacuation and rationing were, explain how they worked and how different people were affected;
- describe some of the jobs women did during the war;
- describe what the holocaust was and who suffered as a result - make links and comparisons to issues today;
- evaluate and assess the reason, impact and significance of key wartime events;

Our Tudor program of study focusses on:

- Battle of Bosworth Field
- Tudor monarchs
- Henry VIII and 6 wives
- Dissolution of the monasteries
- Tudor feasting and feast days e.g.
 Epiphany
- Everyday life, including food, buildings etc.
- The Barbican (and linking to the





Pilgrim Fathers after the Tudors).

listory











In geography we focus predominantly on comparisons between South America and the UK, in particular Peru; however, other aspects of the



geography curriculum are taught and referred to through cross-curricular learning. The program of study covers the following objectives:

- locate the world's countries, using maps to focus on Europe and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities;
- identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night).

Place knowledge

understand geographical similarities and differences through the study of



human and physical geography of a region of the United Kingdom and a region within South America.

Human and physical geography

- describe and understand key aspects of:
- physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes;
- human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.

Geographical skills and fieldwork

- use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied
- use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.









Over the year, many of the scientific concepts that children meet are more abstract, such as the study of evolution, or the behaviour of light. There are still plenty of opportunities for investigation, and also to find out about the work of some great scientists of today and the past. The areas Year 6 will be learning are as follows:

Living Things and their Habitats

- Describe how living things are classified into groups, including microorganisms;
- Give reasons for the classification of plants and of animals according to their characteristics.

Animals including Humans

- Know the functions of the main parts of the circulatory system such as the heart, lungs, blood vessels and blood;
- Describe how nutrients and water are transported within animals;
- Recognise the impact of diet, exercise, drugs and lifestyle on the way bodies function.

Evolution and Inheritance

- Recognise that fossils provide information about life on Earth millions of years ago;
- Understand that offspring are not normally identical to their parents;
- Identify that plants and animals are adapted to their environments, and that

this adaptation leads to evolution over long periods of time.

Light

- Recognise that light appears to travel in straight lines;
- Understand that we see things because light is reflected off objects and into the eye;
- Explain how shadows are formed.

Electricity

• Compare the variation in

performance of bulbs and buzzers by changing the number of cells in a circuit;

• Use the recognised scientific symbols to draw a simple circuit diagram.

Throughout the Year 6 science programme of study, children will develop a variety of skills including:

- Plan a range of scientific investigations and managing the variables effectively;
- Take precise measurements, and repeat tests where appropriate to improve the validity of the results;
- Present results using tables, scatter graphs, line graphs and other diagrams;
- Explain the conclusions drawn from results, including their limitations.





Being a Church of England school, Religious Education plays an important part in the curriculum. The majority of our learning in Year 6 is centred around Christianity; however children will learn about *Buddhism* in the summer term and compare this to Christianity.



CREATION Creation and science conflicting or complementary?

- *Identify the importance of Creation in the Big Story for Christians;
- *Compare ideas with the way Christians interpret Genesis 1;
- *Show understanding of why many Christians find faith and science go together; *Understand Christians belief

in God as Creator from Genesis;

Understanding Christianity - GOSPEL

What would Jesus do?

- *Make clear connections between Bible texts, Jesus, 'Good News', how Christians interpret the Bible;
- *Relate Gospel ideas to how they live their life.



KINGDOM OF GOD What kind of king is Jesus?

Make clear connections between how Christians put their belief into practice in different ways including: worship and service to the community, receiving



and practising forgiveness. *Able to consider possible meanings for Biblical texts.

SALVATION What difference does the resurrection make for Christians?

- *Learn about the Big Story in the Bible explaining how Incarnation and Salvation fit in;
- *Explain what Christians mean when the say Jesus was a 'sacrifice;'
- *Suggest meanings for Jesus' death, resurrection, comparing ideas and ways in which Christians interpret the text;
- *Explain how Christians celebrate Holy Communion / the Last Supper;





- *How do Christians put their belief in practice?
- *Explain the connection between Isaiah 53, John 19 and the concepts of Messiah, Sacrifice and Salvation.



Children will also learn about:

- *Jesus the Healer
- *Jesus the Miracle Worker
- *Temptations

Buddhism

- *The Buddha Siddhartha Gautama 'The Buddha.'
- *Enlightenment
- *The birth place of the Buddha and images of the Buddha

Buddhist teaching:

*Buddhist practice, festivals

and ceremonies, *Meditation, Nirvana (enlightenment); *Compassion, Awareness; *Buddhists stories, including the birth of Siddhartha Gautama;

Symbols:

Lotus flower The Wheel The Bodhi Tree

The Buddhist Community around the world:

Monks and places of worship.



Ausic

In Year 6, we cover a variety of musical styles from around the world and across time. We particularly focus musical topics based around Word War II popular music, South American Samba and Indonesian Gamelan. However, this is only a small part of a much wider learning experience.

Children learn to:

- play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression;
- use and understand staff and other musical notations;
- appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians;
- improvise and compose music for a range of purposes using the interrelated dimensions of music including: dynamics, timbre, pitch; tempo etc.







- listen with attention to detail and recall sounds with increasing aural memory;
- develop an understanding of the history of music.





In Year 6, our main art themes are linked to other curricular topics. Children develop their skills in using a broad range of mediums.

to create sketch books to record their observations and use them to review

and revisit ideas:



- to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials (E.g. pencil, charcoal, paint, clay and print making);
- To learn about great artists, architects and designers in history e.g. Constable, Franz Marc, Henry Moore, Sir Christopher Wren, Michael Angelo and Bernini.









Design

- use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups e.g. iPad apps, earthquake proof bridges or a healthy sandwich etc.
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes etc.

Make



- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately;
- select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.



Evaluate

- investigate and analyse a range of existing products;
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work;





 understand how key events and individuals in design and technology have helped shape the world e.g. I K Brunel – bridges.

Technical knowledge

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures;
- understand and use mechanical systems in their products (for example, gears, pulleys, cams, levers and linkages);
- understand and use electrical systems in their products (for example, series circuits incorporating switches, bulbs, buzzers and motors when designing light-up toys for our WWII topic for example);
- apply their understanding of computing to program, monitor and control their products.

Cooking and nutrition

understand and apply the principles of a healthy and varied diet e.g.

design and prepare a Peruvian healthy meal using Peruvian ingredients;

 prepare and cook a variety of predominantly savoury dishes using a range of cooking





techniques e.g. vegetarian Thai curry, sandwiches, quiche, omelettes etc.

understand seasonality, and know

where and how a variety of ingredients are grown, reared, caught and processed e.g. blackberry and apple crumble in the Autumn term or preparing a pheasant for cooking.







Year 6 enjoy communicating, collaborating and competing with each other. They develop an understanding of how to improve in different physical activities and sports and learn how to evaluate and recognise their own success.

 Use running, jumping, throwing and catching in isolation and in combination;



- Play competitive games, modified where appropriate (for example, badminton, basketball, cricket, football, hockey, netball, rounders and tennis), and apply basic principles suitable for attacking and defending;
- Develop flexibility, strength, technique, control and balance (for example, through athletics, dance and

gymnastics);

- Perform dances using a range of movement patterns;
- take part in outdoor and adventurous activity challenges both individually and within a team;
- Compare their performances with previous ones and demonstrate improvement to achieve their personal best.



Swimming and water safety

- swim competently, confidently and proficiently over a distance of at least 25 metres;
- use a range of strokes effectively (for example, front crawl, backstroke and breaststroke);
- perform safe self-rescue in different water-based situations.





Computing

BISHOP CORNISH SCHOOL YEARLY OVERVIEW



Year 6 use computers, iPads and other digital technology to develop their computing skills as part of everyday learning e.g. Internet research; presenting facts using a variety of programmes including Microsoft Power Point and Microsoft Word; specialised apps for specific purposes e.g. GarageBand for composing or Book Creator etc.

Children will also have the opportunity to develop skills such as the following:

- design, write and debug programs that accomplish specific goals
- use sequence, selection, and repetition in programs;
- use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- understand computer networks including the internet; how they can



provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration;

- use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programmes, systems and content that accomplish given goals, including

collecting, analysing, evaluating and presenting data and information

- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.
- Year 6 will also include regular teaching of e-safety to ensure that children feel confident when using computers and the Internet, and know what to do if they come across something either inappropriate or uncomfortable.

In Year 6, as in previous KS2 year groups, we continue to learn Spanish, focussing on the following learning objectives:

Spanish .anguages

- listen attentively to spoken language and show understanding by joining in and responding;
- explore the patterns and sounds of language through songs and rhymes and link the spelling, sound and meaning of words;
- engage in conversations; ask and answer questions; express opinions and respond to those of others; seek clarification and help;
- speak in sentences, using familiar vocabulary, 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;
- present ideas and information orally to a range of audiences;



- read carefully and show understanding of words, phrases and simple writing.
- appreciate stories, songs, poems and rhymes in the language;
- broaden their
 vocabulary and develop their
 ability to understand new
 words that are introduced into familiar written material,

including through using a dictionary;

- write phrases from memory, and adapt these to create new sentences, to express ideas clearly;
- describe people, places, things and actions orally and in writing;
- understand basic grammar appropriate to the language being studied, including (where relevant): feminine, masculine and neuter forms and the conjugation of high-frequency verbs; key features and patterns of the language; how to apply these, for instance, to build sentences; and how these differ from or are similar to English.