

Year 5

Termly Curriculum Overview

Autumn Term 1

Ourselves.

Religious

Education

Children will learn that the Church, the Christian family, is made up of smaller Christian families called dioceses. Each diocese is led by a bishop. The bishops continue the work of 'the twelve', the apostles, who continued the work and mission of Jesus. Jesus is the head of these families. He is the head of the Church. There are other Christian families which are not part of the Catholic Church. Ecumenism is the word used for promoting unity among Christian churches. One of the final prayers of Jesus was that all Christian families might be one.

Life choices

Children will be taught that Christians believe that everyone is invited to share in the life and work of God through Baptism. The Bible recounts God's invitations to people to share in his life and work: among them Moses, Samuel, the prophets, Mary and the apostles. They will learn about the Sacrament of Marriage and how a promise of commitment is given during the Liturgy in the Service. Children will also learn how volunteers and others show their commitment to the Church.

Reasoning with large whole numbers 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.
- Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000.
- Solve number problems and practical problems that involve all of the above.
- Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.

Problem solving with integer addition and subtraction objectives

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

Line graphs and timetables objectives

- Solve comparison, sum and difference problems using information presented in a line graph.
- Complete, read and interpret information in tables, including timetables.
- Solve problems involving converting between units of time.

Maths

Multiplication and division objectives

- Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.
- Recognise and use square numbers and the notation for squared.
- 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 and divide whole numbers by 10, 100 and 1000.
- multiply and divide numbers mentally drawing upon known facts
- solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes
- multiply numbers up to 4 digits by a one- or two-digit number using a formal written method
- 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
- Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.

Perimeter and area objectives

- Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres.
- Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of non-rectilinear shapes.

Maths meetings

Number

- Place value of 5-digit and 6-digit whole numbers.
- Count back past zero to include negative numbers using a number line.
- Recognise Roman numerals up to 1000 (M).
- Count forwards and backwards in steps of powers of ten (including tenths and hundredths).
- Count in multiples of 7, 9, 25, 50, 100 and 1000.
- Recalling and using multiplication facts up to 12 x 12.
- Add, subtract, multiply and divide numbers mentally with increasingly large numbers, drawing upon known facts (including number bonds and multiplication facts, halving, doubling, applying place value, inverse, commutativity etc).
- Compare and order fractions and decimals.
- Find fractions of simple amounts and quantities (linking this to division)
- Add and subtract fractions with the same denominator.

Geometry

- Name and describe the properties of 2-D and 3-D shapes.
- Identify acute and obtuse angles and compare and order angles (do not include reflex angles at this point).

Measures including money and time.

- Convert between different units of metric measure (cm/mm, cm/m, kg/g, km/m, l/ml). Tell the time to the nearest minute with analogue and digital clocks and 12-hour and 24-hour notation.
- Solve problems involving converting between units of time from hours to minutes; minutes to seconds; years to months; weeks to days.
- Measure and calculate the perimeter of a rectilinear shape (including squares) in cm and m.

Statistics.

 Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.

English Reading

This term the children will be reading and analysing Henry's Freedom Box by Ellen Levine, using it to draw inference, such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence.

In addition children will have guided reading sessions in small groups in order to develop inference and deduction skills

English Spelling, Punctuation, Grammar	Relative clauses beginning with who, which, where, when, whose, that, or an omitted relative pronoun Indicating degrees of possibility using adverbs [for example, perhaps, surely] or modal verbs [for example, might, should, will, must] 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] Informal and formal speech Modal verbs to describe degrees of possibility Using adverbials to link ideas across paragraphs Punctuation Brackets, dashes or commas to indicate parenthesis Use of commas to clarify meaning or avoid ambiguity Spelling Endings which sound like /ʃəs/ spelt –cious or –tious Not many common words end like this. If the root word ends in – ce, the /ʃ/ sound is usually spelt as c – e.g. vice – vicious, grace – gracious, space – spacious, malice – malicious. Exception: anxious. Words ending in –able The –able ending is usually, but not always, used if a complete root word can be heard before it, even if there is no related word ending in –action. e.g in reliable the complete word rely is heard, but the y changes to i in accordance with the rule. Words from Year 5/6 spelling list
English Writing	Children will have the opportunity to write at length, diary writing and biographical writing. There are also short writing opportunities within other areas of the curriculum. Come and see- biographical writing about Maximilian Kolbe. Geography- An investigation into how human activity is affecting climate zones.
Science	Properties and Changes of Materials During science this term the children will compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets. They will conduct comparative and fair tests, for the particular uses of everyday materials, including wood, metals and plastic.
Geography	Climate zones During Geography this term the children will learn to locate some of the world's time zones. Describe biomes and vegetation belts: locate places studied in relation to the Equator, Tropics of Cancer and Capricorn, and their latitude and longitude, understand that climate and vegetation are connected in an example of a biome, e.g. the tropical rainforest, understand our food is grown in many different countries because of their climate, explain some ways a biome (including the oceans) is valuable and under threat from human activity and to improve their mapping skills.

Physical Education	Swimming The children will aim to swim 10 metres by the end of their 10 swimming sessions. They will also take part in water safety lessons. Dodge ball Pupils will improve on key skills used in dodgeball such as throwing, dodging and catching. They also learn how to select and apply tactics to the game to outwit their opponent. In dodgeball, pupils achieve this by hitting opponents with a ball whilst avoiding being hit. Pupils are given opportunities to play games independently and are taught the importance of being honest whilst playing to the rules. Pupils learn officiating skills when refereeing games and are given opportunities to evaluate and suggest improvements to their own and others' performances.
Computing	Coding The children will learn to represent a program design and algorithm, to create a program that simulates a physical system using decomposition, explore string and text variable types so that the most appropriate can be used in programs and to use the Launch command in 2Code Gorilla • To program a playable game with timers and scorepad.
Art	Drawing. Architects and architecture During Art the children will be given a general overview of the role of an architect, before exploring a range of famous buildings from around the world. They will discuss which building they think looks best and why, and think about why their opinions may differ. They will find out who Sir Christopher Wren was and discover his role as an architect. They will look in detail at the architecture and design of St Paul's Cathedral. Children will then look at four different shading techniques - hatching, crosshatching, scumbling and stippling. They will apply these skills when shading in an outline of St Paul's Cathedral. They will explore the history, design and features of St Basil's Cathedral in Russia and they will learn to identify lines of symmetry in the Taj Mahal and explore some of its other design features, including its reflection. They will consider how and why trends in architectural styles change over time. Finally, the children will draw on everything they have found out about architecture and a variety of building designs to design their own building for a particular purpose. Focusing on the exterior aesthetics, your class could design a building using their own criteria or those given to them by a 'client', thinking about colour, line, shape and features.
French	Weather In this unit the children will learn how to: repeat and recognise the vocabulary for weather in French, ask what the weather is like today, say what the weather is like today, Create a French weather map, describe the weather in different regions of France using a weather map with symbols.
PHSE	Physical health and wellbeing in the media The children will learn that food and drink adverts can use misleading marketing messages in order to make a product seem healthier for consumers. They will are compare the health benefits of a food or drink product in comparison with an advertising campaign - identifying advertising as one influence on peoples choices about food and drink. They will analyse how the media portray celebrities and recognise that they can be presented as role models and that they may be a good or not-so good role model for young people. They will explain why we need to be cautious about things we see, hear or read about in the media. Pupils learn about how the media can manipulate images and that these images may not reflect reality

Relationships, Sex Education	Social and Emotional Showing knowledge and understanding of emotional relationship changes as we grow and develop.
Curriculum Enrichment	