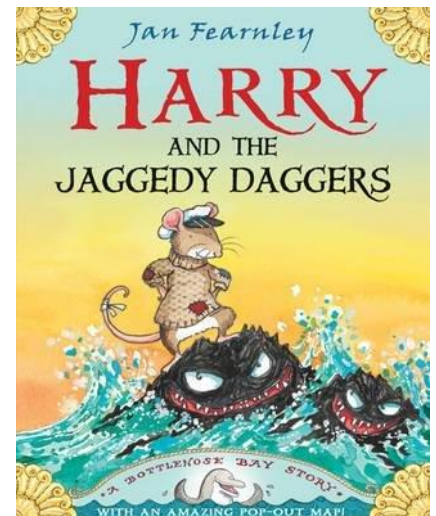
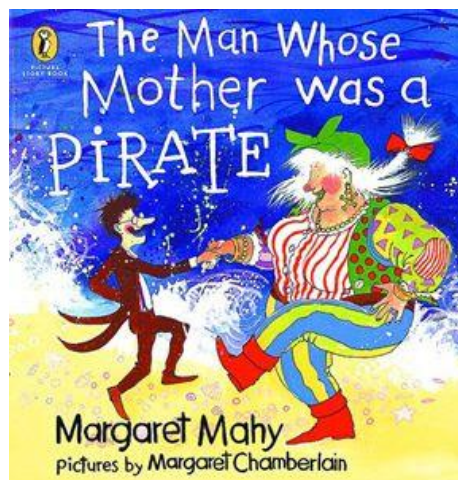
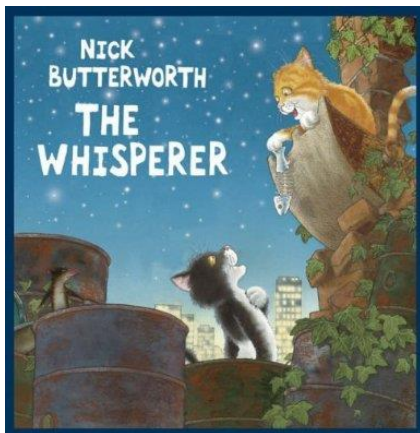
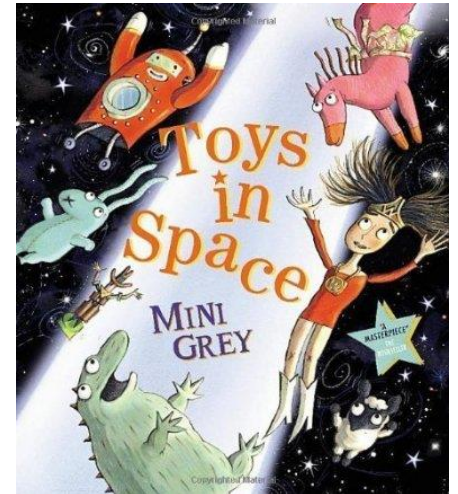
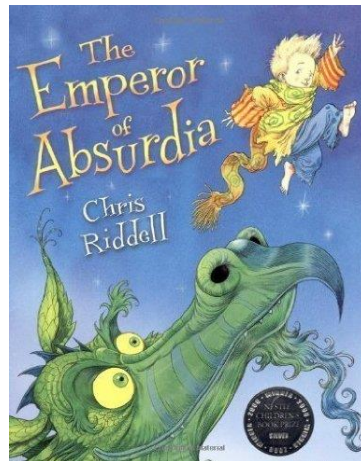
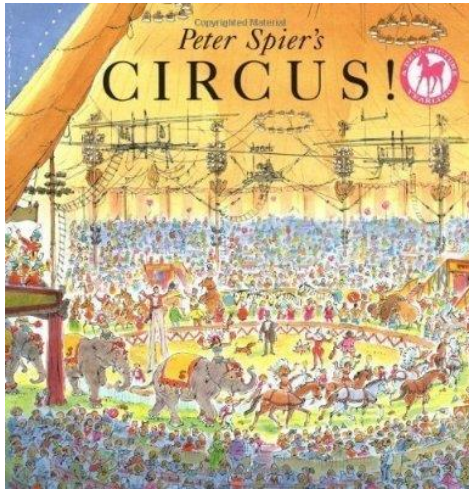


By Brook Valley Primary Curriculum



Lower Key Stage Two

Our Curriculum

By Brook Valley Primary School is following the new Primary Curriculum as set out by the Government. It is taught creatively through the use of interesting and stimulating Books and Pictures. We work on a two yearly cycle with two year groups working together to ensure there is full coverage of every area.

Lower key Stage Two

English

Speaking and Listening

In years 3 and 4, pupils should become more familiar with and confident in using language in a greater variety of situations, for a variety of audiences and purposes, including through drama, formal presentations and debate.

Reading

Pupils should be taught to:

- apply their growing knowledge of root words, prefixes and suffixes, both to read aloud and to understand the meaning of new words they meet
read further exception words, noting the unusual correspondences between spelling and sound, and where these occur in the word.
- develop positive attitudes to reading and understanding of what they read by:
 - listening to and discussing a wide range of fiction, poetry, plays, non-fiction and reference books or textbooks
 - reading books that are structured in different ways and reading for a range of purposes
 - using dictionaries to check the meaning of words that they have read
 - increasing their familiarity with a wide range of books, including fairy stories, myths and legends, and retelling some of these orallyidentifying themes and conventions in a wide range of books
 - preparing poems and play scripts to read aloud and to perform, showing understanding through intonation, tone, volume and action
 - discussing words and phrases that capture the reader's interest and imagination
 - recognising some different forms of poetry [for example, free verse, narrative poetry]
- understand what they read, in books they can read independently, by:
 - checking that the text makes sense to them, discussing their understanding and explaining the meaning of words in context
 - asking questions to improve their understanding of a text
 - drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence
 - predicting what might happen from details stated and implied
 - identifying main ideas drawn from more than one paragraph and summarising these
 - identifying how language, structure, and presentation contribute to meaning
- retrieve and record information from non-fiction

participate in discussion about both books that are read to them and those they can read for themselves, taking turns and listening to what others say.

Grammar

Year 3

Formation of **nouns** using a range of **prefixes** [for example *super-*, *anti-*, *auto-*]

Use of the **forms** *a* or *an* according to whether the next **word** begins with a **consonant** or a **vowel** [for example, *a rock*, *an open box*]

Word families based on common **words**, showing how words are related in form and meaning [for example, *solve*, *solution*, *solver*, *dissolve*, *insoluble*]

Expressing time, place and cause using **conjunctions** [for example, *when*, *before*, *after*, *while*, *so*, *because*], **adverbs** [for example, *then*, *next*, *soon*, *therefore*], or **prepositions** [for example, *before*, *after*, *during*, *in*, *because of*]

Introduction to paragraphs as a way to group related material

Headings and sub-headings to aid presentation

Use of the **present perfect** form of **verbs** instead of the simple past [for example, *He has gone out to play* contrasted with *He went out to play*]

Introduction to inverted commas to **punctuate** direct speech

Year 4

The grammatical difference between **plural** and **possessive** –s

Standard English forms for **verb inflections** instead of local spoken forms [for example, *we were* instead of *we was*, or *I did* instead of *I done*]

Noun phrases expanded by the addition of modifying adjectives, nouns and preposition phrases (e.g. *the teacher* expanded to: *the strict maths teacher with curly hair*)

Fronted adverbials [for example, *Later that day*, *I heard the bad news.*]

Use of paragraphs to organise ideas around a theme

Appropriate choice of **pronoun** or **noun** within and across **sentences** to aid cohesion and avoid repetition

Use of inverted commas and other **punctuation** to indicate direct speech [for example, a comma after the reporting clause; end punctuation within inverted commas: *The conductor shouted, "Sit down!"*]

Apostrophes to mark **plural** possession [for example, *the girl's name*, *the girls' names*]

Use of commas after **fronted adverbials**

Writing

Handwriting

Pupils should be taught to:

- use the diagonal and horizontal strokes that are needed to join letters and understand which letters, when adjacent to one another, are best left unjoined
- increase the legibility, consistency and quality of their handwriting [for example, by ensuring that the downstrokes of letters are parallel and equidistant; that lines of writing are spaced sufficiently so that the ascenders and descenders of letters do not touch].

Composition

Pupils should be taught to plan their writing by:

- discussing writing similar to that which they are planning to write in order to understand and learn from its structure, vocabulary and grammar
- discussing and recording ideas
- draft and write by:
 - composing and rehearsing sentences orally (including dialogue), progressively building a varied and rich vocabulary and an increasing range of sentence structures
 - organising paragraphs around a theme
 - in narratives, creating settings, characters and plot
 - in non-narrative material, using simple organisational devices [for example, headings and sub-headings]
- evaluate and edit by:
 - assessing the effectiveness of their own and others' writing and suggesting improvements
 - proposing changes to grammar and vocabulary to improve consistency, including the accurate use of pronouns in sentences
- proof-read for spelling and punctuation errors

read aloud their own writing, to a group or the whole class, using appropriate intonation and controlling the tone and volume so that the meaning is clear.

Spelling

Pupils should be taught to:

- use further prefixes and suffixes and understand how to add them
- spell further homophones
- spell words that are often misspelt place the possessive apostrophe accurately in words with regular plurals [for example, girls', boys'] and in words with irregular plurals [for example, children's]
- use the first two or three letters of a word to check its spelling in a dictionary

write from memory simple sentences, dictated by the teacher, that include words and punctuation taught so far.

Maths

Year 3

Number

Pupils should be taught to:

- count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number
- recognise the place value of each digit in a three-digit number (hundreds, tens, ones)
- compare and order numbers up to 1000
- identify, represent and estimate numbers using different representations
- read and write numbers up to 1000 in numerals and in words
 - solve number problems and practical problems involving these ideas.

Pupils should be taught to:

- add and subtract numbers mentally, including:

- a three-digit number and ones
- a three-digit number and tens
- a three-digit number and hundreds
- add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction
- estimate the answer to a calculation and use inverse operations to check answers
 - solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.
- recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
- write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods
 - solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.
- count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10
- recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators
- recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators
- recognise and show, using diagrams, equivalent fractions with small denominators
- add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$]
- compare and order unit fractions, and fractions with the same denominators
 - solve problems that involve all of the above.

Measurement

Pupils should be taught to:

- measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)
- measure the perimeter of simple 2-D shapes
- add and subtract amounts of money to give change, using both £ and p in practical contexts
- tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks
- estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight
- know the number of seconds in a minute and the number of days in each month, year and leap year
 - compare durations of events [for example to calculate the time taken by particular events or tasks].

Geometry

Pupils should be taught to:

- draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them
- recognise angles as a property of shape or a description of a turn
- identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle
 - identify horizontal and vertical lines and pairs of perpendicular and parallel lines.
 - Statistics

Pupils should be taught to:

- interpret and present data using bar charts, pictograms and tables
 - solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.

Year 4

Number

Pupils should be taught to

- count in multiples of 6, 7, 9, 25 and 1000
 - find 1000 more or less than a given number
 - count backwards through zero to include negative numbers
 - recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)
 - order and compare numbers beyond 1000
 - identify, represent and estimate numbers using different representations
 - round any number to the nearest 10, 100 or 1000
 - solve number and practical problems that involve all of the above and with increasingly large positive numbers
- read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.
- add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate
 - estimate and use inverse operations to check answers to a calculation
- solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.
- recall multiplication and division facts for multiplication tables up to 12×12
 - use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers
 - recognise and use factor pairs and commutativity in mental calculations
 - multiply two-digit and three-digit numbers by a one-digit number using formal written layout

solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.

- recognise and show, using diagrams, families of common equivalent fractions
 - count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.
 - solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number
 - add and subtract fractions with the same denominator
 - recognise and write decimal equivalents of any number of tenths or hundredths
 - recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$
 - find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths
 - round decimals with one decimal place to the nearest whole number
 - compare numbers with the same number of decimal places up to two decimal places
- solve simple measure and money problems involving fractions and decimals to two decimal places.

Measurement

Pupils should be taught to:

- Convert between different units of measure [for example, kilometre to metre; hour to minute]
 - measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres
 - find the area of rectilinear shapes by counting squares
- estimate, compare and calculate different measures, including money in pounds and pence
- read, write and convert time between analogue and digital 12- and 24-hour clocks
- solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.

Properties of shape

- compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes
 - identify acute and obtuse angles and compare and order angles up to two right angles by size
 - identify lines of symmetry in 2-D shapes presented in different orientations
- complete a simple symmetric figure with respect to a specific line of symmetry.

Geometry

Pupils should be taught to:

- describe positions on a 2-D grid as coordinates in the first quadrant
 - describe movements between positions as translations of a given unit to the left/right and up/down
- plot specified points and draw sides to complete a given polygon.

Statistics

Pupils should be taught to:

- interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.
solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.

Science

During years 3 and 4, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- asking relevant questions and using different types of scientific enquiries to answer them
- setting up simple practical enquiries, comparative and fair tests
- making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
- gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
- using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
- identifying differences, similarities or changes related to simple scientific ideas and processes

Year 3

Plants

- identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers
- explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant
- investigate the way in which water is transported within plants

explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.

Animals, including human

- identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat

identify that humans and some other animals have skeletons and muscles for support, protection and movement.

Rock

- compare and group together different kinds of rocks on the basis of their appearance and simple physical properties

- describe in simple terms how fossils are formed when things that have lived are trapped within rock
- recognise that soils are made from rocks and organic matter.

Light

- recognise that they need light in order to see things and that dark is the absence of light
 - notice that light is reflected from surfaces
 - recognise that light from the sun can be dangerous and that there are ways to protect their eyes
 - recognise that shadows are formed when the light from a light source is blocked by a solid object
- find patterns in the way that the size of shadows change.

Forces and magnet

- compare how things move on different surfaces
- notice that some forces need contact between two objects, but magnetic forces can act at a distance
- observe how magnets attract or repel each other and attract some materials and not others
- compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials
- describe magnets as having two poles

predict whether two magnets will attract or repel each other, depending on which poles are facing.

Year 4

Living things and their habitat

- recognise that living things can be grouped in a variety of ways
- explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment

recognise that environments can change and that this can sometimes pose dangers to living things.

Animals, including humans

- describe the simple functions of the basic parts of the digestive system in humans
- identify the different types of teeth in humans and their simple functions

construct and interpret a variety of food chains, identifying producers, predators and prey.

States of matter

- compare and group materials together, according to whether they are solids, liquids or gases
- observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)

identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.

Sound

- identify how sounds are made, associating some of them with something vibrating
- recognise that vibrations from sounds travel through a medium to the ear

- find patterns between the pitch of a sound and features of the object that produced it
 - find patterns between the volume of a sound and the strength of the vibrations that produced it
- recognise that sounds get fainter as the distance from the sound source increases.

Electricity

- identify common appliances that run on electricity
- construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers
- identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery
- recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit

recognise some common conductors and insulators, and associate metals with being good conductors.

Computing

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- are responsible, competent, confident and creative users of information and communication technology.

History

- changes in Britain from the Stone Age to the Iron Age
- the Roman Empire and its impact on Britain
- Britain's settlement by Anglo-Saxons and Scots
- the Viking and Anglo-Saxon struggle for the Kingdom of England to the time of Edward the Confessor
- a local history study
- a study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066
- the achievements of the earliest civilizations – an overview of where and when the first civilizations appeared and a depth study of one of the following: Ancient Sumer; The Indus Valley; Ancient Egypt; The Shang Dynasty of Ancient China
- Ancient Greece – a study of Greek life and achievements and their influence on the western world

a non-European society that provides contrasts with British history – one study chosen from: early Islamic civilization, including a study of Baghdad c. AD 900; Mayan civilization c. AD 900; Benin (West Africa) c. AD 900-1300

Geography

Locational knowledge

- locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities
- name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time
- 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, a region in a European country, and a region within North or 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, and the water cycle
 - 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 the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world
- 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.

Physical education

- 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 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

All schools must provide swimming instruction either in key stage 1 or key stage 2.

In particular, pupils should be taught to:

- 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.

Art

- 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 [for example, pencil, charcoal, paint, clay]
- about great artists, architects and designers in history.

Design and Technology

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
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

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

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]

- 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
- prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
- understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

Music

- play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression
- improvise and compose music for a range of purposes using the inter-related dimensions of music
- listen with attention to detail and recall sounds with increasing aural memory
- 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
- develop an understanding of the history of music.

French

- 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.

Religious Education

Year 3

- Understand what happens during the festival of Divali and think about whether the celebrations bring a sense of belonging to Hindus.
- Find out what the true meaning of Christmas is to Christians and compare this to what Christmas means to us.
- Learn to retell Bible stories when miracles have happened and question whether Jesus really did perform miracles.
- Recall the key events in the Easter story and understand why Jesus' crucifixion symbolises hope for Christians.
- Understand the Hindu belief that there is one God with many different aspects.
- Understand the significance of the River Ganges both for a Hindu and non-Hindu.

Year 4

- Understand the special relationship between Jews and God and the promises they make to each other.
- Understand the symbolism in the Christmas story and think about what the different parts mean to Christians today.
- Understand how celebrating the Passover and keeping Kashrut (food laws) help Jews show God they value their special relationship with Him.
- Understand how Jesus' life, death and resurrection teaches Christians about forgiveness.
- Understand different ways that Jews show their commitment to God, comparing their practices in order to explore which shows the most commitment.
- Understand how important going to church is to show someone is a Christian.

Personal Social Health Education

Our Happy School -Focuses on creating a happy and collaborative learning environment. New ground rules are established building on principles introduced in KS1.

Out and About-Focuses on interacting with other people to enable the children to become better communicators and tackling aspects of safety that may occur when the children are out and about: personal safety; road safety; fire safety and firework safety.

Looking Forward- Focuses on global citizenship. Pupils explore their learning styles and work collaboratively to set and achieve goals through an enterprise activity.

My Friends and Family- Focuses on relationships with friends and family and personal hygiene.

Healthy bodies and healthy minds-Explores the management of feelings including those related to change, surprise and being worried. Children learn about a balanced diet and how to plan healthy meals as well as considering the effects and benefits of exercise.

Ready Steady Go!- Explores various aspects of personal safety. Children identify people they can trust to help them and learn how and where to get help.

Our Happy School- How to manage difficult situations.

Out and About-Solving problems and anger management – both linked to communication skills. It then moves on to focus on staying safe, investigating bullying and being out and about during the darker nights and the winter.

Looking Forward- Development of an enterprise activity for the children to start as an on-going activity in school. The focus is on responsibility and teamwork. The children work together on a team project to raise funds for a charity or school project of their choice.

My Friends and Family-Focuses on relationships with friends and family. It also begins to focus on more sensitive issues such as personal hygiene and puberty recognising that the changes we experience through life are natural and can be embraced positively.

Healthy Bodies and Healthy Minds-Explores coping with feelings, such as stress and anxiety. Children learn about the effects of smoking and how to make choices for themselves, including being assertive. The concept of risk is discussed and children learn about the importance of making healthy choices.

Ready Steady Go! Explores change, where and how to get help, e.g. when playing outdoors, as well as e-safety and keeping personal information safe.

