DALLAM PRIMARY SCHOOL



Year 6 Curriculum

Intent

The curriculum at Dallam Primary is designed to provide a broad and balanced education that meets the needs of all of our children while delivering the programmes of study outlined in the National Curriculum in England. Through a wide range of subjects, it encourages effective communication, independence, curiosity, creativity and resilience to produce collaborators, innovators and leaders. Promoting physical development and mental well-being are key elements in supporting the development of the whole child and promoting a positive attitude to learning.

Central to our curriculum are core skills that underpin everything that we do:

Active Learning:

- To seek out and enjoy challenges
- To collaborate with others
- To show commitment and perseverance
- Assess themselves and others

Basic Skills:

- To speak clearly and convey ideas confidently
- To read and communicate ideas in writing efficiently and effectively.
- To calculate efficiently and apply skills to solve problems
- To use new technologies confidently and purposefully

Creative Thinking:

- To ask questions to extend their thinking
- To generate ideas and explore possibilities
- To overcome barriers by trying out alternatives or new solutions
- To connect ideas and experiences in inventive ways

Our approach enables children to make connections within and across subjects as they acquire the knowledge, understanding and skills they will need for the next stage in their learning and to make a positive contribution to and celebrate diversity within their community and in the wider world today and in the future.

Long Term Plan

	AUT	JMN	SPR	ING	SUMMER	
Science	Evolution and Living things an	d inheritance ad their habitats	Electricity Light		Animals including humans	
Computing		Computers Ifety	An Introduction to Python Investigating how data can be stored and collected. E-Safety		Data Continued Showcasing Digital Literacy Skills E-Safety	
History	Ancient Sumer – A Dep Earliest Ci Civilisation		Ancient Sumer – A Depth Study of One of the Earliest Civilisations Civilisation and Empire		The Industrial revolution and its Impact on Warrington and the Wider World Settlement and Empire	
Geography			Mountai (The Him Mappir	nalayas)	Natural Disasters Around The World Volcanoes and Earthquakes	
Design and Technology	Cooking and Nutrition	Textiles	Electrical Systems	ems Digital World Structures		Mechanisms
Art and			Drawing a	nd Painting		
Design	Print	ing				
Music	Advanced Rhythms	Theme and Variations	Dynamics, Pitch and Tempo	Composing and Performing a Leavers' Song	Becoming Composers	
PE	Outdoor adventure Cognitive Skills (Real PE) Athletics	Creative Skills (Real PE) Invasion Games	Social Skills (Real PE) Gymnastics	Physical Skills (Real PE) Striking and Fielding Games	Health and Fitness (Real PE) Net and Wall Games Dance	Personal Skills (Real PE) Striking and Fielding Games Athletics Dance
RE	Christianity – God How do Christians mark 'turning points' on their journey of life?	Hinduism Is there one journey or many?	Christianity – The Church If life is a journey, what is the destination?	Christianity – Jesus Why do Christians believe Good Friday is 'good'?	Islam What is Hajj and why is it important to Muslims?	Buddhism What do we mean by a good life?
Languages	Verbs / treasure hunt	Restaurants	Planets	Verbs / treasure hunt	Restaurants	Planets
PHSE	Being in My world	Celebrating Difference	Dreams and Goals	Healthy Me	Relationships	Changing Me



Spoken Language

Throughout each year group, pupils will build on the oral language skills build in previous years at a level which is appropriate to their age. They will be encouraged to communicate effectively across a range of contexts and to a range of audiences. They will have opportunities to work in groups of different sizes – in pairs, small groups, large groups and as a whole class. Pupils will be encouraged to take turns and participate constructively in conversations and debates.

- listen and respond appropriately to adults and their peers
- · ask relevant questions to extend their understanding and knowledge
- use relevant strategies to build their vocabulary
- articulate and justify answers, arguments and opinions
- give well-structured descriptions, explanations and narratives for different purposes, including for expressing feelings
- maintain attention and participate actively in collaborative conversations, staying on topic and initiating and responding to comments
- use spoken language to develop understanding through speculating, hypothesising, imagining and exploring ideas
- speak audibly and fluently with an increasing command of Standard English
- participate in discussions, presentations, performances, role play, improvisations and debates
- gain, maintain and monitor the interest of the listener(s)
- · consider and evaluate different viewpoints, attending to and building on the contributions of others
- select and use appropriate registers for effective communication.

Reading

Throughout Year 6, pupils will have opportunities to read and enjoy listening to a range of quality fiction.

The reading spine books for Year 6, which will be read aloud throughout the year are:

Clockwork – Philip Pullman

Rooftoppers – Katherine Rundell

Skellig – David Almond

The poetry spine includes:

Christmas Haiku Red Wolf

Poems for children-Ted Hughes

New and Collected Poems for Children- Carol-Ann Duffy

Reading

Pupils will be taught to:

- 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.
- · maintain positive attitudes to reading and an understanding of what they read by:
 - continuing to read and discuss an increasingly 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
 - increasing their familiarity with a wide range of books, including myths, legends and traditional stories, modern fiction, fiction from our literary heritage, and books from other cultures and traditions
 - recommending books that they have read to their peers, giving reasons for their choices
 - identifying and discussing themes and conventions in and across a wide range of writing
 - making comparisons within and across books
 - learning a wider range of poetry by heart
 - preparing poems and plays to read aloud and to perform, showing understanding through intonation, tone
 and volume so that the meaning is clear to an audience

Reading

- understand what they read by:
 - checking that the book makes sense to them, discussing their understanding and exploring the meaning of words in context
 - asking questions to improve their understanding
 - 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
 - summarising the main ideas drawn from more than 1 paragraph, identifying key details that support the main ideas
 - identifying how language, structure and presentation contribute to meaning
- discuss and evaluate how authors use language, including figurative language, considering the impact on the reader
- distinguish between statements of fact and opinion
- retrieve, record and present information from non-fiction
- participate in discussions about books that are read to them and those they can read for themselves, building on their own and others' ideas and challenging views courteously
- explain and discuss their understanding of what they have read, including through formal presentations and debates, maintaining a focus on the topic and using notes where necessary
- provide reasoned justifications for their views

Reading Across the Curriculum

Throughout Year 6, pupils' learning across the curriculum will be supported by a range of quality books including:

Autumn term

Moth – An Evolutionary Tale

Spring term

When the Giant Stirred

Summer term

Collected Poems for Children

During Year 6, pupils will write a range of genres. Particular focus will be placed on:

stories involving: a journey, and a tale of fear recounts, reports, persuasion, discussion and instructions.

Talk For writing Texts include:

Finding Winnie
The Lost Happy Endings

During Year 6, pupils will write a range of genres. Particular focus will be placed on: Tale of Fear narrative, narrative involving a journey, recount, report, discussion persuasion and instruction.

Pupils will be taught to:

- use further prefixes and suffixes and understand the guidance for adding them
- spell some words with 'silent' letters
- continue to distinguish between homophones and other words which are often confused
- use knowledge of morphology and etymology in spelling and understand that the spelling of some words needs to be learnt specifically
- use dictionaries to check the spelling and meaning of words
- use the first 3 or 4 letters of a word to check spelling, meaning or both of these in a dictionary
- use a thesaurus

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

plan their writing by:

- identifying the audience for and purpose of the writing, selecting the appropriate form and using other similar writing as models for their own
- noting and developing initial ideas, drawing on reading and research where necessary
- in writing narratives, considering how authors have developed characters and settings in what pupils have read, listened to or seen performed

draft and write by:

- selecting appropriate grammar and vocabulary, understanding how such choices can change and enhance meaning
- in narratives, describing settings, characters and atmosphere and integrating dialogue to convey character and advance the action
- précising longer passages
- using a wide range of devices to build cohesion within and across paragraphs
- using further organisational and presentational devices to structure text and to guide the reader [for example, headings, bullet points, underlining]

evaluate and edit by:

- assessing the effectiveness of their own and others' writing
- proposing changes to vocabulary, grammar and punctuation to enhance effects and clarify meaning
- ensuring the consistent and correct use of tense throughout a piece of writing
- ensuring correct subject and verb agreement when using singular and plural, distinguishing between the language of speech and writing and choosing the appropriate register
- proofread for spelling and punctuation errors

- perform their own compositions, using appropriate intonation, volume, and movement so that meaning is clear
- develop their understanding of vocabulary and grammatical concepts by:
 - recognising vocabulary and structures that are appropriate for formal speech and writing, including subjunctive forms
 - 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
 - using expanded noun phrases to convey complicated information concisely
 - using modal verbs or adverbs to indicate degrees of possibility
 - using relative clauses beginning with who, which, where, when, whose, that or with an implied (ie omitted)
 relative pronoun
 - learning the grammar for years 5 and 6 set out in Appendix 2 of the National Curriculum
- indicate grammatical and other features by:
 - using commas to clarify meaning or avoid ambiguity in writing
 - using hyphens to avoid ambiguity
 - using brackets, dashes or commas to indicate parenthesis
 - · using semicolons, colons or dashes to mark boundaries between independent clauses
 - using a colon to introduce a list
 - punctuating bullet points consistently
- use and understand the grammatical terminology for Y5 and 6 accurately and appropriately in discussing their writing and reading

PALS Objectives - Autumn

Writing is planned for and assessed using objectives from PALS files which break down Y5/6 National Curriculum objectives into Year groups and ensure progression through the year.

Y	еаг6	Autumn - Working within
oulary	Nouns and Adjectives	Choose appropriate synonyms for nouns to suit the formality of the writing e.g. old banger, old vehicle. Use a range of expanded noun phrases for description by selecting appropriate determiners adjectives and nouns to convey complicated information concisely and to change and enhance meaning e.g. that vicious guard dog, his gleaming white sports car, the majority of older primary school children. Use a wider range of adjectives selecting synonyms for clarity e.g. minute, small, little Use a wider range of adjectives selecting antonyms for contrast e.g foolish, wise; abundant, scarce. Use a variety of devices for comparatives and superlatives, including modifying adjectives with adverbse.g. the angriest man, the most angry man in town, this man is more angry than his brother.
Vocabulary	Verbs and Adverbs	Use a wider vocabulary using the thesaurus to selectiver bis which are appropriate for different audiences (informal and informal) e.g. find out/discover, ask for / request, go in / enter. Use consistently accurate subjectiver bagreement and use of Standard English in a range of tenses simple past, simple present, imperative. Use a variety of adverbial phrases for manner (how) including preposition phrases e.g. He walked with a limp. He shouted in a loud voice.
	Cohesiv e Devices	Use appropriate pronouns within and across sentences to aid cohesion and avoid repetition of noun including reflexive pronouns e.g. The witch taught herself to fly and possessive pronouns e.g. the dog was hers. Use a wide range of appropriate adverbs and adverbial phrases for time, number, addition, to aid cohesion, clarity and to avoid repetition e.g. Therefore, Consequently, as a result
	41	Use a range of sentences structures including simple sentences for effect and multi-clause sentences using co-ordinating conjunctions e.g. and, so, but, or. Use subordination for time selecting appropriate, conjunctions for clarity, cohesion and to avoid repetition e.g. whilst/as, whenever/every time. Once/as soon as. Use subordination for cause selecting appropriate conjunctions for clarity, cohesion and to avoid repetition e.g. since/because/as, so that/in order that
a	Sentence Structure	Use subordination for positive or negative conditions selecting appropriate conjunctions for clarity, cohesion and to avoid repetition e.g. I will go out even if it rains. I will go out provided that it doesn't rain. Use subordination for concession and comparison selecting appropriate conjunctions for clarity, cohesion and to avoid repetition e.g. although/
Sentence	Senten	even though/ whereas/while He is tall whereas his parents are short. He is tall while his parents are short. Use subordination-writing sentences with two subordinate clauses, including embedded clauses, to elaborate and to specify relationships between ideas e.g. The boy, who was very tired, walked all the way home even though it was raining. As soon as the clock struck midnight, Cinderella ran home because her clothes had turned to rags. Use subordination—varying the structure and order of clauses to emphasise relationships between complex ideas or to convey information succinctly e.g. The man wearing dark clothes, hid in the shadows so that the police did not see him. Shivering with cold, the man sat on the beach while the lifeguards wrapped him in towels. Use question tags in informal language to prompt confirmation e.g. You like chocolate, don't you? You're not happy, are you?
	Punctua	Use the full range of punctuation taught at KSI accurately - capital letters full stops question marks, exclamation marks, commas for list and apostrophes. Use inverted commas (speech marks) and other forms of punctuation accurate in dialogue, including where the speech sentence continues
	<u> </u>	a cross the reporting clause e.g. "Come with me," said Jenny, "and I will show you the garden."

PALS Objectives - Autumn

5	Read and discuss similar writing to understand and learn from its structure, vocabulary, grammar, form audience and purpose e.g. how character and settings have been developed in narrative.
	Use discussion and similar writing to select an appropriate audience, purpose and form for own writing.
	Select and use a planning format to organise initial ideas for own writing (for chosen audience and purpose) sing discussion and similar writing a models.
	Develop initial ideas on own plan through discussion with teacher/peers, drawing on reading and research where necessary.
	Follow own plan to organise, draft and write each paragraph, composing sentences, selecting appropriate grammar and vocabulary to suit the purpose, audience and level of formality.
cess	Revise plan by making improvements before writing to change/enhance meaning e.g. by précising long passages appropriately.
Writing Process	Evaluate the structure, grammar, vocabulary and punctuation of own and others' writing for sense and effectiveness in relation to the selected audience and purpose.
×	Evaluate the structure, grammar, vocabulary and punctuation for appropriate level of formality (register) for the chosen audience, purpose an style of writing
	Edit by suggesting improvements and making changes to grammar, vocabulary and punctuation to clarify meaning and enhance effects.
	Edit to ensure consistent, correct and appropriate use of tenses; correct subject and verb agreement for Standard English; where appropriate, the use of non-Standard English (local spoken forms) in dialogue.
	Edit to ensure appropriate level of formality (register) by making changes to structure, grammar, vocabulary and punctuation to enhance effects or to distinguish between language of speech (e.g. dialogue) and writing (e.g. narration).
	Proof read for spelling and punctuation errors.
	Write narratives (not always linear e.g. parallel story lines) for a range of audiences and purposed in a wide range of genres e.g. historical, Sci fi.
	Write narratives with effective plot and varying structures to suit the genre, audience and purpose.
١.	Organise and develop whole narratives effectively with well-balanced paragraphs and controlled placement of information to engage the reader e.g. withhold information to surprise.
Narrative	Use a wide range of appropriate cohesive devices to make links within and across paragraphs e.g. pronouns, adverbs, adverbial phrases, repetition.
S	Use a range of strategies to conclude narratives, engaging the reader by eliciting a specific response (e.g. surprise, satisfy, shock) choosing whether or not to link back to opening e.g. ending with a cliff hanger.
	Use paragraphs effectively to signal changes (in time, setting, speaker) to engage the reader by shifting the focus or varying the pace of the action.
	Incorporate appropriate and detailed descriptions of settings, atmosphere, action, characters, character' feelings and author's viewpoint throughout text to advance the narrative
	Integrate relevant dialogue at appropriate points throughout the narrative to both convey character and to advance the action

PALS Objectives - Spring

Yeo	ar 6	Spring - Focussing					
	Nouns and Adjective	Modify adjectives using a greater range of adverbs to show degree, or to increase or intensify the adjective e.g. usually, normally, occasionally – The dog with extremely sharp teeth is usually friendly. She is normally right about everything.					
Α.	ъ.,	Use consistently accurate subject verb agreement and use of Standard English in a range of tenses; past progressive, present progressive, future.					
Vocabulary	Verbs and Adverbs	Use the past tense appropriately to affect the presentation of information in a sentence e.g. French is studied by many children. Languages have been introduced by primary schools.					
۸		Use a wide range of appropriate adverbs and adverbial phrases for cause, emphasis, opposition to aid cohesion clarity and to avoid repetition e.g. Therefore, Consequently, As a result.					
	Cohesive	Use a greater range of adverbs to indicate degrees of possibility, probability, certainty and opinion e.g. obviously, luckily, unfortunately.					
	βå	Vary the position of adverbs and adverbial phrases within the sentence for emphasis and effect (fronted or embedded) e.g. David, at the back of the class, was ignoring the teacher. In actual fact, he had lied. He had, in fact, lied. Consequently, the team won.					
	a o o	Use the passive voice to change the focus of attention e.g. The window was broken by Joe not Joe broke the window.					
	Sentence	Use a passive voice when the doer of the action is unknown, general or obvious e.g. The window was broken. Bins are emptied once a week.					
e		Use commas accurately and for clarity in multi-clause sentences.					
Sentence	ujion	Use commas accurately to separate embedded relative clauses using full range of relative pronouns including "whose", "where" e.g. The old lady whose clothes were wet, was ill.					
S	unctuation	Select commas, brackets or dashes to indicate parenthesis e.g. The tramp, locally known as Mr Stinky, lay on a bench. Last night, Bob (our small, black terrier) attacked two of our children – the girls. I passed the EGPaS test – granted, I cheated – but I passed.					
	2	Use a semi-colon or dash to mark the boundary between independent clauses e.g. It's raining: I'm fed up. It's raining — I'm fed up.					
	į į	Use a colon to connect a main clause with a phrase or word for emphasis e.g. She thinks about only one thing: chocolate					

PALS Objectives - Spring

Writing	Process	When discussing writing, recognise and use terminology from previous year groups and Y6: subject, objective; active, passive: synonym, antonym: ellipsis, hyphen, colon, semi-colon, bullet points.
Norrative	National	Use a wide range of appropriate cohesive devices to make links within and across paragraphs e.g. ellipsis.
sition		Write a wide range of chronological non-fiction texts for a range of purposes and audiences in a variety of forms including hybrid texts e.g. newspaper report with persuasion.
omposition	Non-Fiction	Write a wide range of non-chronological texts in a variety of different forms including e.g. non-chronological report including explanation and persuasion.
٥		Use a full range of layout devices to structure the text e.g. headings, sub-headings, columns, underlining, bullets or tables.
-Fice		Organise and develop whole texts effectively with well-balanced paragraphs and controlled placement of information to suit the purpose and form of the text type and to engage the reader.
×		Use a wide range of appropriate cohesive devices to make links within and across paragraphs e.g. pronouns, adverbs, adverbial phrases, tense choices, repetition, ellipsis.
		Write introductions to meet the specific needs of the purpose, audience and form of the text type e.g. orientate, introduce, give personal viewpoint and engage the reader
		Write conclusions to meet the specific needs of the purpose, audience and form of the text type e.g. precis and/or evaluate ideas, give advice, show personal viewpoint, link back to appropriate parts of the text.

PALS Objectives - Summer

Year 6		Summer - Securing					
Vocabulary	Verbs and Adverbs	Use a range of appropriate verb forms and tenses accurately, for meaning and effect, including perfect tense forms to mark relationships of time and cause; present perfect, past perfect, present perfect progressive, past perfect progressive e.g. He had worked here for five years before retiring. He had been working for years because he wanted a good pension.					
cat	0 m	Use repetitive words or phrases to aid cohesion e.g. One reason Another reason.					
Voc	Cohesive	Use ellipsis to aid cohesion i.e omitting words that are unnecessary e.g. I would like to go to the park but I can't (go to the park).					
	Structure	Use the subjunctive form in formal language to express a hypothetical situation e.g. If I were you, I'd buy that dress. If I were taller, I would choose that dress.					
ce	Sentence	Use the subjunctive form in formal language to express desire or obligation e.g. I wish it were the weekend. The teacher demanded that the boy return the sweets					
Sentence	lon	Use commas or hyphens to clarify meaning and avoid ambiguity e.g. Let's eat, Grandpa or Let's eat Grandpa; man eating shark or man-eating shark; recover or re-cover.					
Se	Punctuation	Use a colon to mark the boundary between independent clauses, where the colon acts as a gateway to further explanation or expansion e.g. She has a secret: she loves chocolate. There is only one thing you need to know about cabbage soup: it looks and smells like sewage.					
	Pu	Select appropriate punctuation format and maintain consistency when presenting information in lists with bullet points e.g. full sentence demarcation if bullet points are full sentences; no punctuation if bullet points are works or short phrases.					
	- 2	When discussing writing, recognise and use terminology from previous year groups and Y6: subject, objective, active, passive; synonym,					
Composition	Writing Process	antonym; ellipsis, hyphen, colon, semi-colon, bullet points.					
	Non- Fiction	Incorporate appropriate and detailed description of subject matter and personal viewpoint (where relevant) throughout the text to inform and engage the identified audience.					

Maths



Throughout Year 5 pupils will:

- develop mathematical fluency and conceptual understanding in increasingly complex problems
- recall and apply knowledge rapidly and accurately
- reason mathematically, recognise and describe relationships and use correct mathematical vocabulary to prove their findings
- solve a wide range of increasingly complex problems both routine and non-routine
- use efficient written and mental methods of calculation
- break problems down into a series of manageable steps
- persevere to find solutions
- make connections between multiplication and division with fractions, decimals, percentages and ratio.
- extend their understanding of the number system and place value to include larger integers
- Be introduced to the language of algebra as a means for solving a variety of problems
- read, spell and pronounce mathematical vocabulary correctly

Number and Place Value

Pupils will be taught to:

- 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 0
- solve number and practical problems that involve all of the above
- 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 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 4 operations
- 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
- use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy

Number and Place Value

- 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 simple st form [for example, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$]
- divide proper fractions by whole numbers [for example, $\frac{1}{3} \div 2 = \frac{1}{6}$]
- associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $\frac{3}{8}$]
- identify the value of each digit in numbers given to 3 decimal places and multiply and divide numbers by
 10, 100 and 1,000 giving answers up to 3 decimal places
- multiply one-digit numbers with up to 2 decimal places by whole numbers
- use written division methods in cases where the answer has up to 2 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 3 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 3 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

- 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
- describe positions on the full coordinate grid (all 4 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 and Proportion

- solve problems involving the relative sizes of 2 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 2 unknowns
- enumerate possibilities of combinations of 2 variables

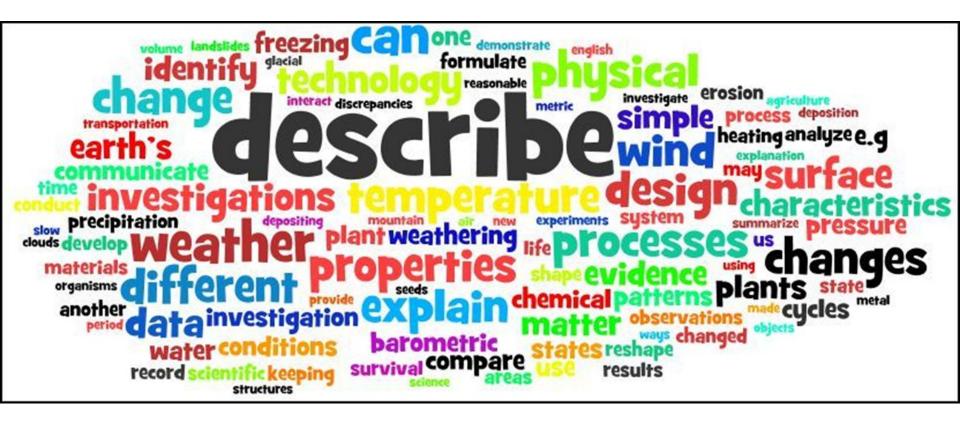
The long term plan for maths in Year 6 ensures full coverage of the National Curriculum.

150		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Andrews	AUIUINII	Numl Place \			umber: action, I and D		3.05	Number: Fractions		ns			
Carina	Spring	Numi		Number: Percentages	Conv	easures rerting u and Vol	nits,	Number: Algebra		100000000000000000000000000000000000000	mber: atio	Statis	tics
Cimenton	Sommer	Geom Propert Sha	ies of	SATs	orepara	tion and	d Tests	Number: Addition, Subtraction, Multiplication and Division		Transiti KS			

Pupils are assessed throughout the year to determine whether they are on track to achieve Age Related Expectations at the end of the Year.

Year 6 ARE	Working within	Focussing	Securing		
Number and the number system	Read, write, order and compare numbers to 1 000 000 Round any number to the regulred degree of accuracy Compare and order fractions , including fractions >1 Identity common multiples ,common factors and prime numbers	Order a set of mixed numbers. Order a set of positive and negative numbers in context, X and + decimals by 10 or 100 and 1000 and explain the effect. Find percentage amounts of whole number quantities Divide fractions by whole numbers	Use fractions as operators, add and subtract fractions and mixed numbers, multiply pairs of proper fractions writing the answer in its simplest form, divide proper fractions by whole numbers. Use negative numbers in context and calculate intervals across zero. Reduce a fraction to its simplest form by dividing both the numerator and denominator. Recall and use equivalences of fractions, decimals and percentages.		
Calculation	Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams Begin to calculate percentages of quantities and measures	Interpret remainders as whole numbers, fractions and decimals as appropriate Check solutions by applying inverse operations or estimating using approximations. Calculate fractional or \$\mathbf{S}\$ parts of guantities and measurements	Use written methods for short and long x of 3 digit by 2 digit numbers including involving decimals. Use written methods for short and long + of numbers involving decimals. Use brackets. Use a calculator to check answers		
Problem solving	Identify the steps needed to solve a multistep problem Solve problems involving scaling by simple fractions	Use all four operations with decimals to 2 places to solve multi-step problems Explain methods and reasoning orally and in writing. Express a general statement in words and symbolic form.	Identify and use all 4 operations to solve problems involving numbers and quantities including conversion of currency and percentages Solve simple problems involving ratio or proportion. Express a general statement and use simple formulae involving one or two operations.		
Measurement	Segin to use a protractor to measure and draw angles to the nearest degree. Estimate volume and capacity, eq. using 1 cm ² blocks and water	Use, read write and convert between standard units of length, mass, volume and time Recognise that shapes with the same area can have different perimeter and vice versa Understand and use the formula in words length x breadth for the area of rectangle.	Solve problems involving calculation and conversion of measures to 3d.p. Use a protractor to measure and draw angles to the nearest degree. Know imperial units: mile, pint, gallon, pound, ounce and rough equivalents of: lo and kg, oz and g, miles and km, litres and pints/gallons. Estimate and calculate volume of cubes/ cubolds as cm ² and m ²		
Geometry	Draw and translate simple shapes and reflect them in the axes Recognise and find angles where they meet at a at a point and one whole turn (total 360°) I angles at a point or are on a straight line	Recognise and build 3D shapes and construct nets Compare and classify geometric shapes based on properties and find unknown angles Begin to plot co-ordinates in all 4 guadrants Draw and label 2D shapes accurately specified by their coordinates, predicting missing coordinates.	Know that the angle sum of a triangle is 180° Recognise and find missing angles where they are vertically opposite Illustrate and name parts of a circle - radius, diameter and circumference. Know that diameter is twice the radius Describe position on full coordinate grid [all 4 quadrants]		
Statistics	Solve comparison, sum and difference problems using information presented in graphs, charts and tables.	interpret and construct line graphs and use to solve problems. Calculate and interpret the mean as an average	Interpret and construct pie charts and use to solve problems.		

SCIENCE



The National Curriculum specifies the content of each year group's science curriculum. Throughout Year 6, Pupils will:

- develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics
- develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them
- develop the scientific knowledge required to understand the uses and implications of science, today and for the future
- describe associated processes and key characteristics in common language, and be familiar with, and use,
 technical terminology accurately and precisely
- build up an extended specialist vocabulary
- apply their mathematical knowledge to their understanding of science, including collecting, presenting and analysing data
- work scientifically within the contexts of biology, chemistry and physics
- use a variety of approaches of approaches to answer scientific questions including: observing over time;
 pattern seeking; identifying, classifying and grouping; comparative and fair testing (controlled investigations);
 and researching using secondary sources

Science is taught through project work wherever possible, but is often covered as a series of discrete lessons and is organised across the year in Year 6 as follows.

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Living things and Their Habitats	Evolution and Inheritance	Electricity	Light	Animals Includ	ding Humans

Evolution and Inheritance

Pupils will:

- recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago
- recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents
- identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution

Living Things and Their Habitats

Pupils will:

- describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals
- give reasons for classifying plants and animals based on specific characteristics

Light

Pupils will:

- recognise that light appears to travel in straight lines
- use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye
- explain that we see things because light travels from light sources to our eyes or from light sources to objects
 and then to our eyes
- use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them

Electricity

Pupils will:

- associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit
- compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches
- · use recognised symbols when representing a simple circuit in a diagram

Animals Including Humans

Pupils will:

- identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood
- · recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function
- describe the ways in which nutrients and water are transported within animals, including humans

SMSC



Whilst opportunities for the development of SMSC are incorporated into all aspects of school life, there are many areas of the curriculum that are designed to specifically address different elements of Social, Moral, Spiritual and Cultural education:

Social Development:	Moral Development:	Spiritual Development:	Cultural Development:
Exercise leadership and responsibility Work successfully as a member of a group or a team Work co-operatively Use a range of social skills in different contexts	Express views in an open and safe learning environment Develop the desire to explore my own and others' views Explore project	Reflect on own experiences, and learn from reflection Enjoy learning, and be fascinated by the world around us Develop an appreciation of the intangible	Participate in literature, drama, music, art, crafts, and other cultural events. Develop a sense of personal enrichment through encounters with
BIG ISSUES through Explore project	 Develop a willingness to express views on ethical issues 	 Ask questions and be curious – 'why?', 'How?', 'Where?' 	cultural media and traditions from a range of cultures
Reflect on my contribution to society and to the world of work Appreciate the rights and responsibilities of individuals Recognise and respect social differences Challenge the values of a group or wider community Foster a sense of community, with common, inclusive values Understand and debate social issues	Develop an ability to make responsible and reasoned judgements on moral dilemmas Develop the ability to think through the consequences of my own and others' actions	Develop a sense of empathy with others, concern and compassion Develop a respect for insight as well as for knowledge and reason Understand feeling and emotions Use imagination and creativity in their learning) Develop an expressive and creative impulse Have space for their own thoughts, ideas and concerns	Develop a willingness to participate in, and respond to, artist and cultural enterprises Pupils' understanding and appreciation of the wider range of cultural influences that have shaped their own heritage and that of others

Spanish



Pupils will be taught Spanish in KS2. They will:

- Listen to and understand the main points and some detail from a short spoken passage.
- Give a presentation in a clear audible voice.
- Converse briefly without prompts.
- Enjoy listening and speaking confidently.
- Read aloud with confidence, enjoyment and expression, in chorus or individually.
- · Read and understand the main points and some detail from a short written passage.
- Write several sentences from memory.
- Develop a short text using a model.
- Demonstrate understanding of and respect for cultural diversity.
- Present information about an aspect of another country.
- Create spoken and written language using simple sentences.
- Use a dictionary/ICT resource to look up spellings.
- Discuss with a friend and devise role-plays.
- Plan and prepare themselves for a language activity.

Autumn Term



Throughout this term children will:

- Plan and research
- Analyse and evaluate
- Explore issues, events and problems from different perspectives
- Support conclusions using reasoned arguments and evidence
- Show empathy
- Show a commitment to justice
- Communicate learning in relevant ways
- Work towards a goal

History: What was special about the Sumerians?

Historical enquiry

- Recognise primary and secondary sources
- Use, evaluate and link a range of sources to find out about an aspect of life in Ancient Sumer
- Suggest omissions and the means of finding out (ongoing)
- Use the knowledge gathered to work out how conclusions were arrived at

Chronology

- Place current study on a timeline in relation to other studies to sequence up to 10 events
- Use relevant dates and terms relating to the passing of time (ongoing)

Historical Interpretation

- Use an increasing depth of factual knowledge to describe past societies and periods and begin to make links between Ancient Sumer and other time periods studied
- Recognise the past is represented and interpreted in different ways and give reasons for this (ongoing)

Art and Design

Exploring and Evaluating – ongoing throughout the year

- Explore the roles and purposes of artists, craftspeople and designers working in different times and cultures
- Compare ideas, methods and approaches in their own and others' work and say what they think and how they feel about them
- Annotate with detailed notes which explain work in sketchbooks

Printing

- Create printing blocks by simplifying an initial sketchbook idea
- Use relief or impressed method to create prints with 3 overlays
- · Work into prints with a range of media e.g. pens, colour pens and paints
- Experiment with screen printing

Design Technology

Design

Annotate designs to explain decisions made

Make

- Use pins effectively to secure a template
- Sew a strong running stitch with small neat stitches

Evaluate

Justify own work based on the design criteria

Cooking and Nutrition

- Write a recipe which can be followed by another person
- Follow a recipe independently
- Suggest improvements for their own and others recipes
- Define 'processed' and 'non processed' and talk about the difference
- Follow food hygiene rules independently

Computing

Computer Networks/Programming

- Understand what Brute Force Hacking is and how to keep passwords safe and secure.
- Identify how the first computer cracked the Enigma code.
- Research and present information about important historical figures in computing.
- Explore capabilities and commands of the text based programme Logo.
- Explore the use of nested loops.
- Alter a picture using text based programme language Python.
- Use loops in programme to create Islamic art.

Data Handling/Skills Showcase - Online Safety

- Explore a range of ways to tackle negative feelings that come from being online.
- Look at the consequences of sharing things online.

Music

Performing

- Use complex rhythms to be able to perform a theme
- Play more complex rhythms in ¾ time

Composing

- Build a sense of pulse when working with rhythmic patterns
- Use knowledge of rhythm to create own composition
- Use knowledge of rhythmic notation to notate own composition
- Begin to use music notation to create visual representations of increasingly complex rhythms

Appraising

• Compare and contrast different variations in a well-known piece of music

Listening and Applying

• Develop an understanding of the Kodaly method and learn the rhythm names

RE

Expressing and communicating ideas related to religious and worldviews

Shared Human Experiences (ongoing)

- Discuss the importance of saying sorry and forgiveness in maintaining relationships with others
- Discuss the special milestones that people might celebrate during a person's life and how beliefs may influence these
- Consider and discuss what support people might need on life's journey

The Search for Personal Meaning (ongoing)

- Consider and discuss how they have changed so far and the impact of guidance
- Reflect on happiness
- Ask questions and respond thoughtfully to questions about life's journey
- Reflect on the benefits and difficulties of forgiveness

Christianity (God)

- Discuss Christian rituals and how they reflect a person's relationship with God
- · Use religious words and phrases to explain actions and symbols within rituals and ceremonies

Islam

- Analyse the 5 Pillars of Islam
- Discuss Hajj and its importance to Muslims

PSHE

Being in My World

Celebrating Difference

- · I can explain ways in which difference can be a cause for celebration as well as a source of conflict
- I can show empathy for people in either situation

Knowledge and Understanding – Fitness and Health – ongoing throughout the year

- Be able to suggest ways to warm up and cool down that suit the activity.
- Explain the effects of exercise on the body, being specific about the benefits particular systems and organs

Athletics

- I can improve and sustain running techniques across a range of events
- I can apply jumping and throwing techniques across a range of events and sports.

Games

- I can control movement with a ball whilst moving
- I can dribble effectively around obstacles.
- I understand how to change tactics to improve performance ongoing throughout the year
- I can play recognised version of net game showing tactical awareness and knowledge of rules and scoring – ongoing throughout the year

Cognitive Skill (Real PE)

- I can review, analyse and evaluate my own and others' strengths and weaknesses.
- I can read and react to different situations as they develop.

Creative Skill (Real PE)

- I can effectively disguise what I am about to do next.
- I can use variety and creativity to engage an audience.

Spring Term



Throughout this term, pupils will:

- Recognise our roles as Global citizens
- Recognise that we can impact our environment and community
- Show a commitment to fairness
- Show empathy
- Analyse and evaluate
- Communicate learning in relevant ways
- Work towards a goal

History: What legacy did the Sumerians leave behind?

Historical enquiry

Suggest omissions and the means of finding out (ongoing)

Chronology

Use relevant dates and terms relating to the passing of time (ongoing)

Historical Knowledge

- Describe beliefs, behaviour and characteristics of people in Ancient Sumer, recognising differences in views and feelings
- Compare beliefs and behaviour with another time period studied
- Use evidence to support and illustrate an explanation on the causes and effects of an event in Ancient Sumer

Historical Interpretation

- Identify and describe reasons for and results of historical events, situations and changes in Ancient Sumer
- Recognise the past is represented and interpreted in different ways and give reasons for this (ongoing)

Geography: What is it like at the top of the world?

Locational Knowledge

- Use maps to locate countries of the world and major cities.
- Identify environmental regions and key physical and human characteristics around the world using maps.

Human and Physical Knowledge

Describe and understand key aspects of a mountain range in the wider world (The Himalayas)

Geographical Skills and Fieldwork

- Use an OS map to interpret a place, taking into account contour lines and symbols
- Use the 8 points of a compass and 6 figure grid references to identify and describe locations
- communicate geographical information through the collection and interpretation of numerical information
- communicate geographical information through writing at length (ongoing)

Design Technology

Design

Use CAD efficiently to create a design

Talk about designs which are effective and ineffective and give justification for this

Make

Measure, mark and cut wood independently

Use a range of materials to reinforce and add decoration

Create a stable base

Incorporate a circuit into a base

Evaluate

Use peer feedback to improve a design

Describe what makes a successful structure and justify own use of materials

Technical Knowledge

- Understand that structures can be strengthened by manipulating material shapes
- Create a footprint plan and understand what these are used for

Art and Design

Exploring and Evaluating – ongoing throughout the year

- Explore the roles and purposes of artists, craftspeople and designers working in different times and cultures
- Compare ideas, methods and approaches in their own and others' work and say what they think and how they feel about them
- Annotate with detailed notes which explain work in sketchbooks

Drawing

- Work independently from a variety of sources using close observation skills and to develop their own style.
- Explain why they have combined different tools and techniques to create their drawings
- Develop the use of a focal point to create perspective

Music

Performing

- Improvise as a group, using dynamics, pitch and texture
- Use vocal improvisation and known melodies against a backing track
- Sing songs from memory with accuracy, fluency, control and expression

Composing

- Represent dynamics, pitch and texture using graphic notation
- With some support, write lyrics for a song and begin to organise song structure
- Work collaboratively to compose a melody

Appraising

- With support, begin to appraise and evaluate the work of a classical composer using some musical vocabulary
- Discuss musical eras in context
- Listen to and describe music

Listening and Applying

Explore the musical concept of theme and variations

Computing

Data Handling/Creating Media

- Identify how barcodes and QR codes work.
- Identify how infrared waves transmit data.
- Explore the uses of Radio Frequency Identification.
- Evaluate and analyse mobile data,
- Create and edit radio play.
- Learn about how computer designs have changed overtime.
- Design a computer for the future.

Online Safety

Know how to create a positive online reputation

Expressing and communicating ideas related to religious and worldviews

Shared Human Experiences (ongoing)

- Discuss the importance of saying sorry and forgiveness in maintaining relationships with others
- Discuss the special milestones that people might celebrate during a person's life and how beliefs may influence these
- Consider and discuss what support people might need on life's journey

The Search for Personal Meaning (ongoing)

- Consider and discuss how they have changed so far and the impact of guidance
- Reflect on happiness
- Ask questions and respond thoughtfully to questions about life's journey
- Reflect on the benefits and difficulties of forgiveness

Christianity (Jesus)

- Retell the story of Holy Week (Easter story)
- Explain how and why Christians might celebrate Easter at home and in Church using religious vocabulary

Christianity (The Church)

- Explain how beliefs about the death and resurrection of Jesus might affect the life of a Christian
- Discuss forgiveness of sin using the Christian terms: confession, repentance, atonement, reconciliation)

PSHE

Dreams and Goals

- I can describe how people can work together to help make the world a better place
- I can identify why I am motivated to do this

Healthy Me

- · I can evaluate when alcohol is being used responsibly, anti-socially or being misused
- I can tell you how I feel about using alcohol when I am older and my reasons for this
- I know about different types of drugs and their uses and their effects on the body particularly the liver and heart
- I can keep myself safe and avoid emergencies and also how to deal with emergencies if they happen
- I can use different strategies to manage stress and pressure to keep me emotionally healthy

Knowledge and Understanding – Fitness and Health – ongoing throughout the year

- Be able to suggest ways to warm up and cool down that suit the activity.
- Explain the effects of exercise on the body, being specific about the benefits particular systems and organs

Games

- I can use different ways of bowling
- I can play recognised version of net game showing tactical awareness and knowledge of rules and scoring ongoing throughout the year

Gymnastics

- I can perform a range of rolls showing different entrances and exits.
- I can plan and perform with precision, control and fluency, a movement sequence showing a wide range of actions including variations in speed, levels and directions
- I can adapt sequences to include a partner or a small group

Social Skills (Real Gym)

• I can involve others and motivate those around me to perform better.

Physical Skills (Real PE)

- I can effectively transfer skills and movements across a range of activities and sports.
- I can perform a variety of skills consistently and effectively in challenging or competitive situations.

Summer Term



Throughout this term, pupils will:

- Show flexibility
- Organise time and resources
- Adapt ideas as circumstances change
- Be creative
- Explore different ways of expression
- Communicate learning in relevant ways
- Work towards a goal

History: How did the Victorians change the world?

Chronology

• Use relevant dates and terms relating to the passing of time (ongoing)

Historical Knowledge

- Know about an the industrial revolution and its impact on Warrington
- Know how the industrial revolution affected the wider world

Historical Interpretation

Recognise the past is represented and interpreted in different ways and give reasons for this

Geography: Why do people choose to live in dangerous places?

Place Knowledge

• Understand geographical similarities and differences through the comparison of human and physical features of different earthquake zones/volcanic regions around the world

Human and Physical Knowledge

- Describe and understand key aspects of volcanoes and earthquakes
- Use digital mapping to identify and compare populations in earthquake and volcanic zones
- Draw conclusions about why people live in volcanic and earthquake zones based on understanding
 of human and physical features such as economic activity and distribution of natural resources

Geographical Skills and Fieldwork

- use diagrams to demonstrate an understanding of geographical processes (volcanoes and earthquakes)
- communicate geographical information through writing at length (ongoing)

Art and Design

Exploring and Evaluating – ongoing throughout the year

- Explore the roles and purposes of artists, craftspeople and designers working in different times and cultures
- Compare ideas, methods and approaches in their own and others' work and say what they think and how they feel about them
- Annotate with detailed notes which explain work in sketchbooks

Painting and Mixed Media

- understand how to analyse and find meaning in a famous painting
- demonstrate an understanding of painting techniques to make personal choices
- select appropriate tools and materials to create an intended effect

Design Technology

Design

• Create a cross-sectional diagram to support a design

Make

- Use a ruler to measure and mark accurately
- Understand and use a bench hook and saw safely

Evaluate

- Give meaningful feedback on others work
- Talk about and justify changes they plan to make to a project

Music

Performing

- Work as a group to perform a piece of music, keeping in time and communicating with the group.
- Perform with accuracy and fluency from graphic and staff notation and from their own notation.

Composing

- To understand that 'major' key signatures use note pitches that sound cheerful and upbeat.
- To understand that 'minor' key signatures use note pitches that can suggest sadness and tension.
- Represent changes in pitch, dynamics and texture using graphic notation, justifying their choices with reference to musical vocabulary.

Appraising

- Identifying the way that features of a song can complement one another to create a coherent overall effect.
- Use musical vocabulary correctly when describing and evaluating the features of a piece of music.

Knowledge and Understanding – Fitness and Health – ongoing throughout the year

- Be able to suggest ways to warm up and cool down that suit the activity.
- Explain the effects of exercise on the body, being specific about the benefits particular systems and organs

Dance

- I can respond to a range of stimuli, improvising freely using a range of controlled movements and patterns
- Create dances using a range of movement patterns from different styles of dance.

Games

 I can play recognised version of net game showing tactical awareness and knowledge of rules and scoring – ongoing throughout the year.

Health and Fitness (Real Dance)

• I can explain how individuals need different types and levels of strength and fitness to be more effective in how they create and perform their dance.

Personal Skills (Real PE)

- I can create my own learning plan and revise that plan when necessary.
- I can accept critical feedback and make changes.

Computing

Data Handling/Skills Showcase

- Learn how to transfer data safely.
- Investigate the data usage of online activity.
- Identify how data analysis can improve city life.
- Design a system for a smart school.
- Present ideas of how we can turn our school into a SMART school.
- Choose and design an electronic product.
- Code the programme efficiently using sequencing, selection, variables, inputs and outputs.
- Create a website for their product.
- Create a video advertisement for your product.

Online Safety

- Know that we can report online bullying and that evidence of this should be captured.
- Identify potential online scams.

RE

Expressing and communicating ideas related to religious and worldviews

Shared Human Experiences (ongoing)

- Discuss the importance of saying sorry and forgiveness in maintaining relationships with others
- Discuss the special milestones that people might celebrate during a person's life and how beliefs may influence these
- Consider and discuss what support people might need on life's journey

The Search for Personal Meaning (ongoing)

- Consider and discuss how they have changed so far and the impact of guidance
- Reflect on happiness
- Ask questions and respond thoughtfully to questions about life's journey
- Reflect on the benefits and difficulties of forgiveness

Hinduism

- Explain the Hindu views on reincarnation
- Describe and explain the four ashramas

Buddhism

- Talk about the Eight Fold Path
- Talk about the Four Noble Truths

PSHE

Relationships

- · I can recognise when people are trying to gain power or control
- I can demonstrate how I could stand up for myself or my friends in a situation where someone is being controlling

Changing Me

- I can describe how a baby develops from conception through the nie months of pregnancy and how it is born
- I recognise how I feel when I reflect on the development and birth of a baby