

Exminster Primary School Curriculum 2014

Year Six

Context

The most important part of any curriculum is the children and therefore we believe in a very child led curriculum. On the following pages you will find a range of skills and knowledge that we will support your children in learning but his will done in a context driven by the children.

Before the start of the new term teachers share with the children the skills and knowledge that they need to teach them and then ask them to come up with ideas about what they want to know about the different areas and the topics and themes that could be used. We call this 'Pupil Voice'. Teachers then use these ideas to begin to plan for that term.

Planning however is not a fixed entity and if the class start to take a theme/topic in a particular direction the teachers will follow these interests.

Each term you will be provided with a curriculum letter which will outline the skills and knowledge which the children will be learning in that given term along with the theme/topic that will link much of the work together.

Mathematics



	YE	AR 6
Sequence 1	 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 solve number and practical problems that involve all of the above identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places 	 use, read, write and convert between standard units, converting measurements of length, mass and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places convert between miles and kilometres
Sequence 2	 perform mental calculations, including with mixed operations and large numbers use their knowledge of the order of operations to carry out calculations involving the four operations solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why solve problems involving addition and subtraction use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy solve problems which require answers to be rounded to specified degrees of accuracy use simple formulae 	 generate and describe linear number sequences express missing number problems algebraically find pairs of numbers that satisfy an equation with two unknowns enumerate possibilities of combinations of two variables solve problems involving the calculation and conversion of units of measure, using decimal notation to three decimal places where appropriate use, read, write and convert between standard units, converting measurements of length, mass and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to three decimal places interpret and construct pie charts and line graphs and use these to solve problems
Sequence 3	 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 four operations solve problems involving addition, subtraction, multiplication 	 multiply one-digit numbers with up to two decimal places by whole numbers use written division methods in cases where the answer has up to two decimal places solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison use simple formulae generate and describe linear number sequences express missing number problems algebraically find pairs of numbers that satisfy an equation with two unknowns enumerate possibilities of combinations of two variables solve problems involving the calculation and conversion of units of measure, using decimal notation to three decimal places where appropriate use, read, write and convert between standard units, converting measurements of length, mass and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation

	 and division use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy 	 to up to three decimal places interpret and construct pie charts and line graphs and use these to solve problems calculate and interpret the mean as an average
Sequence 4	 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 	 use simple formulae express missing number problems algebraically find pairs of numbers that satisfy an equation with two unknowns enumerate possibilities of combinations of two variables recognise that shapes with the same areas can have different perimeters and vice versa calculate the area of parallelograms and triangles recognise when it is possible to use the formulae for area and volume of shapes
Sequence 5	 read, write, order and compare numbers up to 10 000 000 and determine the value of each digit round any whole number to a required degree of accuracy use negative numbers in context, and calculate intervals across zero solve number and practical problems that involve all of the above 	 identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving the answers up to three decimal places use, read, write and convert between standard units, converting measurements of length, mass and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places
Sequence 6	 use negative numbers in context, and calculate intervals across zero perform mental calculations, including with mixed operations and large numbers use their knowledge of the order of operations to carry out calculations involving the four operations solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why solve problems involving addition and subtraction use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy solve problems which require answers to be rounded to specified degrees of accuracy use simple formulae 	 generate and describe linear number sequences express missing number problems algebraically find pairs of numbers that satisfy an equation with two unknowns enumerate possibilities of combinations of two variables solve problems involving the calculation and conversion of units of measure, using decimal notation to three decimal places where appropriate use, read, write and convert between standard units, converting measurements of length, mass and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places interpret and construct pie charts and line graphs and use these to solve problems

 • 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 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 for care, camportate for a personner nultiples and prime numbers • use their knowledge of the order of operations to cary out calculations involving the four operations and division • use stimulation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy • multiply on-digit numbers with up to two decimal places by whole numbers • use written division methods in cases where the answer has up to two decimal places by whole numbers • use written division methods in cases where the answer has up to two decimal places • diverting the formal written method of a problem, an appropriate degree of accuracy • multiply on-digit numbers with up to two decimal places by whole numbers • use written division methods in cases where the answer has up to two decimal places • advite problems	Sequence 7	 use common factors to simplify fractions; use common multiples to express fractions in the same denomination compare and order fractions, including fractions >1 associate a fraction with division and calculate decimal fraction equivalents [for example 0.375] for a simple fraction [for example %] recall and use equivalences between simple fractions, decimals and percentages, including in different context identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers to three decimal places use simple formulae generate and describe linear number sequences express missing number problems algebraically 	 find pairs of numbers that satisfy an equation with two unknowns solve problems involving the calculation and conversion of units of measure, using decimal notation to three decimal places where appropriate use, read, write and convert between standard units, converting measurements of length, mass and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to three decimal places interpret and construct pie charts and line graphs and use these to solve problems
 solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison 	Sequence 8	 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 four operations solve problems involving addition, subtraction, multiplication and division use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy multiply one-digit numbers with up to two decimal places by whole numbers use written division methods in cases where the answer has up to two decimal places solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use 	 can be found by using integer multiplication and division facts solve problems involving unequal sharing and grouping using knowledge of fractions and multiples use simple formulae generate and describe linear number sequences express missing number problems algebraically find pairs of numbers that satisfy an equation with two unknowns enumerate possibilities of combinations of two variables solve problems involving the calculation and conversion of units of measure, using decimal notation to three decimal places where appropriate use, read, write and convert between standard units, converting measurements of length, mass and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to three decimal places convert between miles and kilometres interpret and construct pie charts and line graphs and use these to solve problems

Sequence 9	 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 describe positions on the full coordinate grid (all four quadrants) draw and translate simple shapes on the coordinate plane, and reflect them in the axes use simple formulae 	 express missing number problems algebraically find pairs of numbers that satisfy an equation with two unknowns enumerate possibilities of combinations of two variables calculate the area of parallelograms and triangles recognise when it is possible to use the formulae for area and volume of shapes calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm³) and cubic metres (m³) and extending to other units [for example, mm³ and km³] solve problems involving similar shapes where the scale factor is known or can be found
Sequence 10	 read, write, order and compare numbers up to 10 000 000 and determine the value of each digit round any whole number to a required degree of accuracy use negative numbers in context, and calculate intervals across zero solve number and practical problems that involve all of the above use common factors to simplify fractions; use common multiples to express fractions in the same denomination 	 compare and order fractions, including fractions >1 identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places use, read, write and convert between standard units, converting measurements of length, mass and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places convert between miles and kilometres
Sequence	 perform mental calculations, including with mixed operations and large numbers use their knowledge of the order of operations to carry out calculations involving the four operations solve 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 add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions solve problems which require answers to be rounded to specified degrees of accuracy use simple formulae 	 generate and describe linear number sequences express missing number problems algebraically find pairs of numbers that satisfy an equation with two unknowns enumerate possibilities of combinations of two variables solve problems involving the calculation and conversion of units of measure, using decimal notation to three decimal places where appropriate use, read, write and convert between standard units, converting measurements of length, mass and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to three decimal places interpret and construct pie charts and line graphs and use these to solve problems calculate and interpret the mean as an average

Sequence 12	 use common factors to simplify fractions; use common multiples to express fractions in the same denomination compare and order fractions, including fractions >1 associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example ¾] recall and use equivalences between simple fractions, decimals and percentages, including in different contexts identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places use simple formulae 	 generate and describe linear number sequences express missing number problems algebraically find pairs of numbers that satisfy an equation with two unknowns solve problems involving the calculation and conversion of units of measure, using decimal notation to three decimal places where appropriate use, read, write and convert between standard units, converting measurements of length, mass and time from a smaller unit of measure to a larger unit, and vice versa, using decimal places interpret and construct pie charts and line graphs and use these to solve problems
Sequence 13	 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 four operations solve problems involving addition, subtraction, multiplication and division use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy multiply simple pairs of proper fractions, writing the answer in its simplest form [for example V₄ × V₂ = V₆] divide proper fractions by whole numbers [for example, V₃ ÷ 2 = V₆] multiply one-digit numbers with up to two decimal places by whole numbers 	 use written division methods in cases where the answer has up to two decimal places solve problems 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 the relative sizes of two quantities, where missing values can be found by using multiplication and division facts solve problems involving unequal sharing and grouping using knowledge of fractions and multiples use simple formulae generate and describe linear number sequences express missing number problems algebraically find pairs of numbers that satisfy an equation with two unknowns enumerate possibilities of combinations of two variables solve problems involving the calculation to three decimal places where appropriate use, read, write and convert between standard units, converting measurements of length, mass and time from a smaller unit of measure to a larger unit, and vice versa, using decimal places interpret and construct pie charts and line graphs and use these to solve problems calculate and interpret the mean as an average

- 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

Sequence

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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 four quadrants)
- draw and translate simple shapes on the coordinate plane, and reflect them in the axes
- recognise that shapes with the same areas can have different perimeters and vice versa

- calculate the area of parallelograms and triangles
- recognise when it is possible to use the formulae for area and volume of shapes
- calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm³) and cubic metres (m³) and extending to other units [for example, mm³ and km³]
- use simple formulae
- express missing number problems algebraically
- find pairs of numbers that satisfy an equation with two unknowns
- enumerate possibilities of combinations of two variables
- solve problems involving similar shapes where the scale factor is known or can be found



Strand	Objective
Word	Apply their growing knowledge of root words, prefixes and suffixes (morphology and etymology), as listed in English Appendix 1, both to read aloud and to understand the meaning of new words that they meet (I use the words and word parts that I can read and understand already to think about what new words mean and sound like).
Comprehension	Continuing to read and discuss an increasingly wide range of fiction, poetry, plays, non-fiction and reference books or textbooks (I continue to read and discuss an increasingly wide range of fiction, poetry, plays, non- fiction and reference books as well as text books).
Comprehension	Reading books that are structured in different ways and reading for a range of purposes (I understand what I read, even though books are set out in different ways and are written for different purposes).
Comprehension	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 (I am becoming familiar with a wide range of books from our own literary heritage and also books from other cultures and traditions).
Comprehension	Recommending books that they have read to their peers, giving reasons for their choices (I like to recommend books I have read).
Comprehension	Identifying and discussing themes and conventions in and across a wide range of writing (I am able to identify and discuss themes and conventions in and across a wide range of writing).
Comprehension	Making comparisons within and across books (I can make comparisons within and across books I have read).
Comprehension	Learning a wider range of poetry by heart (I have learnt a wider range of poems by heart).
Comprehension	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 (I am able to read aloud and perform poems and plays, and use appropriate intonation, tone and volume to help the audience with their own understanding).
Comprehension	Checking that the book makes sense to them, discussing their understanding and exploring the meaning of words in context (I check my understanding of books I have read through discussion and exploring the meaning of words).
Comprehension	Asking questions to improve their understanding (I can ask questions about what I have read to further improve my understanding).
Comprehension	Drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence (I show my understanding of what I have read by drawing inferences from within the text and justifying them with evidence).
Comprehension	Predicting what might happen from details stated and implied (From my reading, I can predict what may

	happen in a story from details given and suggested in the text).
Comprehension	Summarising the main ideas drawn from more than one paragraph, identifying key details that support the main ideas (I am able to identify key details and ideas in texts by summarising a given number of paragraphs I have read).
Comprehension	Identifying how language, structure and presentation contribute to meaning (I can show how language, structure and presentation all contribute to meaning in texts I read).
Comprehension	Discuss and evaluate how authors use language, including figurative language, considering the impact on the reader (I know authors use particular language which will have impact on me, the reader).
Comprehension	Distinguish between statements of fact and opinion (I can distinguish between statements of fact and opinion).
Comprehension	Retrieve, record and present information from non-fiction (I can retrieve, record and present information from non-fiction).
Comprehension	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 (I participate in discussions about books I have read, or those that have been read to me by listening to others' ideas and at times challenging views courteously if they differ from my own).
Comprehension	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 (I can present or debate on topics I have read about, using notes if necessary).
Comprehension	Provide reasoned justifications for their views (I am able to justify my views).

Strand	Objective
Transcription	Use further prefixes and suffixes and understand the guidance for adding them (I add prefixes and suffixes using the rules we have worked on in class).
Transcription	Spell some words with 'silent' letters [for example, knight, psalm, solemn] (I can spell some words that include silent letters, such as knight, psalm and solemn).
Transcription	Continue to distinguish between homophones and other words which are often confused (I know some words sound the same but are spelled differently and can point out the different uses of these different words (such as 'eye' and 'I' or 'bee' and 'be')).
Transcription	Use knowledge of morphology and etymology in spelling and understand that the spelling of some words needs to be learnt specifically, as listed in English Appendix 1 (I use the words and word parts that I know to help me spell new words but I also know some words are unique and need to be learnt individually).
Transcription	Use dictionaries to check the spelling and meaning of words (I use a dictionary to check how words are spelled and what words mean).
Transcription	Use the first three or four letters of a word to check spelling, meaning or both of these in a dictionary (I use the first three or four letters of a word to quickly find it in a dictionary).
Transcription	Use a thesaurus (I use a thesaurus to improve my vocabulary use, using a wider set of different words in my text).
Handwriting	Choosing which shape of a letter to use when given choices and deciding whether or not to join specific letters (I make sure others can read my handwriting and decide whether or not to join specific letters).
Handwriting	Choosing the writing implement that is best suited for a task (I choose the writing tool that is best suited for a task).
Composition	Identifying the audience for and purpose of the writing, selecting the appropriate form and using other similar writing as models for their own (I plan the structure of my writing by identifying the audience for my text and the purpose of the writing).
Composition	Noting and developing initial ideas, drawing on reading and research where necessary (I plan my writing by making notes and then developing my initial ideas by reading and researching other texts and thoughts).
Composition	Considering how authors have developed characters and settings in what pupils have read, listened to or seen performed in narratives (I plan my writing by considering how other authors have developed characters and settings).
Composition	Selecting appropriate grammar and vocabulary, understanding how such choices can change and enhance meaning (I draft and write by selecting appropriate grammar and vocabulary, understanding how such choices can change and enhance meaning).

Composition	Describing settings, characters and atmosphere and integrating dialogue to convey character and advance the action in narratives (I review my work to further describe and develop settings, characters and the narrative atmosphere).
Composition	Summarising longer passages (I can summarise a longer passage to create a short text with the same meaning).
Composition	Using a wide range of devices to build cohesion within and across paragraphs (I use themes and details across my texts to help link paragraphs together into a flow of text).
Composition	Using further organisational and presentational devices to structure text and to guide the reader [for example, headings, bullet points, underlining] (I use headings, bullet points and underlining to structure and guide a reader through my writing).
Composition	Assessing the effectiveness of their own and others' writing (I evaluate and edit my work by comparing my texts with the work of others' and explore whether my writing is the high quality I expect).
Composition	Proposing changes to vocabulary, grammar and punctuation to enhance effects and clarify meaning (I evaluate and edit my texts to enhance and clarify by proposing changes to vocabulary, grammar and punctuation).
Composition	Ensuring the consistent and correct use of tense throughout a piece of writing (I ensure I use the consistent and correct use of tense throughout a piece of writing).
Composition	Ensuring correct subject and verb agreement when using singular and plural, distinguishing between the language of speech and writing and choosing the appropriate register (I edit my work to ensure my use of singular and plural words are accurate and I know my writing should not be the language of speech).
Composition	Proof-read for spelling and punctuation errors (I proof-read my work to correct spelling and punctuation mistakes).
Composition	Perform their own compositions, using appropriate intonation, volume, and movement so that meaning is clear (<i>I</i> read aloud my own work so the meaning is clear, fluent and flows correctly).

Writing Objectives – Year 6

Strand	Objective
Vocabulary Grammar Punctuation	Using hyphens to avoid ambiguity (I use hyphens to ensure the reader understands exactly what I mean. For example, man eating shark is not the same as man-eating shark).
Vocabulary Grammar Punctuation	Recognising vocabulary and structures that are appropriate for formal speech and writing, including subjunctive forms (I can write out formal speech or texts using appropriate vocabulary).
Vocabulary Grammar Punctuation	Using passive verbs to affect the presentation of information in a sentence (I use passive verbs to affect the focus of information in a sentence - for example, I can change 'Sam repaired the car' into 'The car was repaired by Sam').

Vocabulary Grammar Punctuation	Understanding how words are related by meaning as synonyms and antonyms [for example, big, large, little] (<i>I</i> know some words have similar meanings (synonyms) and others have opposite meanings (antonyms)).
Vocabulary Grammar Punctuation	Linking ideas across paragraphs using a wider range of cohesive devices: repetition of a word or phrase, grammatical connections [for example, the use of adverbials such as on the other hand, in contrast, or as a consequence], and ellipsis (I link ideas across my work by using a range of devices (such as the repetition of a word or phrase, or using phrases such as on the other hand, in contrast, or as a consequence) and know how to use an ellipsis).
Vocabulary Grammar Punctuation	Understanding layout devices [for example, headings, sub-headings, columns, bullets, or tables, to structure text] (I structure my work with appropriate headings, sub-headings, columns, bullets, or tables).
Vocabulary Grammar Punctuation	Using semi-colons, colons or dashes to mark boundaries between independent clauses (I mark out separate clauses in a sentences by using a semi-colon or colon).
Vocabulary Grammar Punctuation	Using a colon to introduce a list (I use a colon to indicate the beginning of a list).
Vocabulary Grammar Punctuation	Punctuating bullet points consistently (I use bullet points accurately when constructing a list).

<u>Spelling List – Year 6</u>

accommodate	interfere
amateur	mischievous
appreciate	nuisance
bruise	parliament
committee	prejudice
conscience	privilege
conscious	pronunciation
convenience	queue
disastrous	rhyme
foreign	rhythm
guarantee	secretary
hindrance	sufficient
immediate(ly)	yacht

<u> Spoken Language – Year 6</u>

Strand	Objective			
Speaking	Listen and respond appropriately to adults and their peers.			
Speaking	Ask relevant questions to extend their understanding and knowledge.			
Speaking	Use relevant strategies to build their vocabulary .			
Speaking	Articulate and justify answers, arguments and opinions.			
Speaking	Give well-structured descriptions, explanations and narratives for different purposes, including for expressing feelings .			
Speaking	Maintain attention and participate actively in collaborative conversations, staying on topic and initiating and responding to comments .			
Speaking	Use spoken language to develop understanding through speculating, hypothesising, imagining and exploring ideas.			
Speaking	Speak audibly and fluently with an increasing command of Standard English.			
Speaking	Participate in discussions, presentations, performances, role play, improvisations and debates.			
Speaking	Gain, maintain and monitor the interest of the listener(s).			
Speaking	Consider and evaluate different viewpoints, attending to and building on the contributions of others.			
Speaking	Select and use appropriate registers for effective communication.			

Science



Knowledge, Skills and Understanding breakdown for Working Scientifically

Year 6

Planning

- Can they explore different ways to test an idea, choose the best way, and give reasons?
- Can they vary one factor whilst keeping the others the same in an experiment? Can they explain why they do this?
- Can they plan and carry out an investigation by controlling variables fairly and accurately?
- Can they make a prediction with reasons?
- Can they use information to help make a prediction?
- Can they use test results to make further predictions and set up further comparative tests?
- Can they explain, in simple terms, a scientific idea and what evidence supports it?
- Can they present a report of their findings through writing, display and presentation?

Obtaining and presenting evidence

- Can they explain why they have chosen specific equipment? (incl ICT based equipment)
- Can they decide which units of measurement they need to use?
- Can they explain why a measurement needs to be repeated?
- Can they record their measurements in different ways? (incl bar charts, tables and line graphs)
- Can they take measurements using a range of scientific equipment with increasing accuracy and precision?

Considering evidence and evaluating

- Can they find a pattern from their data and explain what it shows?
- Can they use a graph to answer scientific questions?
- Can they link what they have found out to other science?
- Can they suggest how to improve their work and say why they think this?
- Can they record more complex data and results using scientific diagrams, classification keys, tables, bar charts, line graphs and models?
- Can they report findings from investigations through written explanations and conclusions?
- Can they identify scientific evidence that has been used to support to refute ideas or arguments?
- Can they report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations?

- Can they choose the best way to answer a question?
- Can they use information from different sources to answer a question and plan an investigation?
- Can they make a prediction which links with other scientific knowledge?
- Can they identify the key factors when planning a fair test?
- Can they explain how a scientist has used their scientific understanding plus good ideas to have a breakthrough?

- Can they plan in advance which equipment they will need and use it well?
- Can they make precise measurements?
- Can they collect information in different ways?
- Can they record their measurements and observations systematically?
- Can they explain qualitative and quantitative data?

- Can they draw conclusions from their work?
- Can they link their conclusions to other scientific knowledge?
- Can they explain how they could improve their way of working?

Knowledge, Skills and Understanding breakdown for Living Things, their Habitats and Animals, including humans

Year 6

Evolution and Inheritance

- Can they recognise that living things have changed over time and that fossils provide information about living things that inhabited the earth millions of years ago?
- Can they recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents?
- Can they give reasons why offspring are not identical to each other or to their parents?
- Can they explain the process of evolution and describe the evidence for this?
- Can they identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution?

Living Things & their habitats

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

Animals, including humans

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

- Can they talk about the work of Charles
 Darwin, Mary Anning and Alfred Wallace?
- Can they explain how some living things adapt to survive in extreme conditions?
- Can they analyse the advantages and disadvantages of specific adaptations, such as being on two rather than four feet?
- Can they begin to understand what is meant by DNA?

- Can they explain why classification is important?
- Can they readily group animals into reptiles, fish, amphibians, birds and mammals?
- Can they sub divide their original groupings and explain their divisions?
- Can they group animals into vertebrates and invertebrates?
- Can they find out about the significance of the work of scientists such as Carl Linnaeus, a pioneer of classification?
- Can they explore the work of medical pioneers, for example, William Harvey and Galen and recognise how much we have learnt about our bodies?
- Can they compare the organ systems of humans to other animals?
- Can they make a diagram of the human body and explain how different parts work and depend on one another?
- Can they name the major organs in the human body?
- Can they locate the major human organs?
- Can they make a diagram that outlines the main parts of a body?

Knowledge, Skills and Understanding breakdown for Light and Electricity

Year 6

Electricity

- Can they identify and name the basic parts of a simple electric series circuit? (cells, wires, bulbs, switches, buzzers)
- Can they compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers, the on/off position of switches?
- Can they use recognised symbols when representing a simple circuit in a diagram?

Light

- Can they recognise that light appears to travel in straight lines?
- Can they 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?
- Can they explain that we see things because light travels from light sources to our eyes or from light sources to object s and then to our eyes?
- Can they use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them?

- Can they make their own traffic light system or something similar?
- Can they explain the danger of short circuits?
- Can they explain what a fuse is?
- Can they explain how to make changes in a circuit?
- Can they explain the impact of changes in a circuit?
- Can they explain the effect of changing the voltage of a battery?

- Can they explain how different colours of light can be created?
- Can they use and explain how simple optical instruments work? (periscope, telescope, binoculars, mirror, magnifying glass, Newton's first reflecting telescope)
- Can they explore a range of phenomena, including rainbows, colours on soap bubbles, objects looking bent in water and coloured filters.

Computing



Knowledge, Skills and Understanding breakdown for Computing

Year 6

We are app planners- Planning the creation of a mobile app.	We are project managers- Developing project management skills.	We are market researchers- Researching the app market.						
 Can they develop an awareness of the capabilities of smartphones and tablets? Can they understand geolocation, including GPS? Can they identify interesting, solvable problems? Can they evaluate competing products? Can they pitch a proposal for a smartphone or tablet app? 	 Can they scope a project to identify different components that must be successfully combined? Can they identify their existing talents and plan how they can develop further knowledge and skills? Can they identify the component of tasks of a project and develop a timeline to track progress? Can they identify the resources they'll need to accomplish a project? Can they use web-based research skills to source tools, content and other resources? 	 Can they create a set of good survey questions? Can they analyse the data obtained from a survey? Can they conduct an interview or focus group? Can they analyse and interpret the information obtained from interviews or a focus group? Can they present their research findings? 						
We are interface designers- Designing an interface for an app.	We are app developers- Developing a simple mobile phone app.	We are marketeers- Creating video and web copy for a mobile phone app.						
 Can they work collaboratively to design the app's interface? Can they use wireframing tools to create a design prototype of their app? Can they develop or source the individual interface components they will use? Can they address accessibility and inclusion issues? Can they document their design decisions and the process they've followed? 	 Have they become familiar with another programming toolkit or development platform? Can they import existing media assets to their project? Can they write down algorithms for their app? Can they program. Debug and refine the code for their app? Can they thoroughly test and evaluate their app? 	 Can they consider key marketing messages, including identifying a unique selling point? Can they develop a printed flyer or brochure incorporating text and images? Can they further develop knowledge, skills and understanding in relation to creating a website? Can they further develop skills relating to shooting and editing video? 						



Knowledge, Skills and Understanding breakdown for History

Year 6

Chronological understanding

- Can they say where a period of history fits on a timeline?
- Can they place a specific event on a timeline by decade?
- Can they place features of historical events and people from past societies and periods in a chronological framework?

Knowledge and interpretation

- Can they summarise the main events from a specific period in history, explaining the order in which key events happened?
- Can they summarise how Britain has had a major influence on world history?
- Can they summarise what Britain may have learnt from other countries and civilizations through time gone by and more recently?
- Can they describe features of historical events and people from past societies and periods they have studied?
- Can they recognise and describe differences and similarities/ changes and continuity between different periods of history?

Year 6 (Challenging)

Historical enquiry

- Can they look at two different versions and say how the author may be attempting to persuade or give a specific viewpoint?
- Can they identify and explain their understanding of propaganda?
- Can they describe a key event from Britain's past using a range of evidence from different sources?

- Do they appreciate that some ancient civilizations showed greater advancements than people who lived centuries after them?
- Can they suggest relationships between causes in history?
- Can they appreciate how Britain once had an Empire and how that has helped or hindered our relationship with a number of countries today?
- Can they trace the main events that define Britain's journey from a mono to a multi-cultural society?

- Can they suggest why there may be different interpretations of events?
- Can they suggest why certain events, people and changes might be seen as more significant than others?
- Can they pose and answer their own historical questions?



Knowledge, Skills and Understanding breakdown for Geography

Year 6

Geographical Enquiry

Can they confidently explain scale and use maps with a range of scales?

- Can they choose the best way to collect information needed and decide the most appropriate units of measure?
- Can they make careful measurements and use the data?
- Can they use OS maps to answer questions?
- Can they use maps, aerial photos, plans and web resources to describe what a locality might be like?

Physical Geography

- Can they give extended descriptions of the physical features of different places around the world?
- Can they describe how some places are similar and others are different in relation to their human features?
- Can they accurately use a 4 figure grid reference?
- Can they create sketch maps when carrying out a field study?

Human Geography

- Can they give an extended description of the human features of different places around the world?
- Can they map land use with their own criteria?
- Can they describe how some places are similar and others are different in relation to their physical features?

Geographical Knowledge

- Can they recognise key symbols used on ordnance survey maps?
- Can they name the largest desert in the world?
- Can they identify and name the Tropics of Cancer and Capricorn as well as the Artic and Antarctic circles?
- Can they explain how the time zones work?

- Can they define geographical questions to guide their research?
- Can they use a range of self selected resources to answer questions?
- Can they plan a journey to another part of the world which takes account of time zones?
- Do they understand the term sustainable development? Can they use it in different contexts?
- Can they explain how human activity has caused an environment to change?
- Can they analyse population data on two settlements and report on findings and questions raised?
- Can they name and locate the main canals that link different continents?
- Can they name the main lines of latitude and meridian of longitude?

RE



In RE children will learn through the following themes:

What do people believe about life? Theme: Beliefs and Questions/The Journey of Life and Death

This enquiry explores ideas about the natural world and our place in it and relates them to religious and other beliefs (a) What feelings do people experience in relation to birth, change, death and the natural world? (b) What answers might be given by ourselves and by religions and beliefs to questions about: • the origin and meaning of life? • our place in society and the natural world? • the existence of God? • the experience of suffering? • life after death?

How do we make moral choices? Theme: Beliefs in Action in the World

This enquiry explores how religious and other beliefs affect approaches to moral issues

- (a) What are moral questions?
- (b) What are the consequences of the moral choices we make?
- (c) What are the most important moral values and teachings?
- (d) What people and organisations help in making moral choices?
- (e) How do we decide what is right and wrong?

Worldviews - Humanism



Gymnastics	Dance	Invasion Games
 make up longer, more complex sequences, including changes of direction, level and speed develop their own solutions to a task by choosing and applying a range of compositional principles combine and perform gymnastic actions, shapes and balances show clarity, fluency, accuracy and consistency in their movements in small groups, prepare a sequence to be performed to an audience understand the importance of warming up and cooling down say, in simple terms, why activity is good for their health, fitness and wellbeing show an awareness of factors influencing the quality of a performance and suggest aspects that need improving 	 work creatively and imaginatively on their own, with a partner and in a group to compose motifs and structure simple dances perform to an accompaniment expressively and sensitively perform dances fluently and with control warm up and cool down independently understand how dance helps to keep them healthy use appropriate criteria to evaluate and refine their own and others' work talk about dance with understanding, using appropriate language and terminology 	 use different techniques for passing, controlling, dribbling and shooting the ball in games apply basic principles of team play to keep possession of the ball use marking, tackling and/or interception to improve their defence play effectively as part of a team know what position they are playing in and how to contribute when attacking and defending plan practices and warm ups to get ready for playing safely recognise their own and others' strengths and weaknesses in games suggest ideas that will improve performance
Athletics	ΟΑΑ	Striking and Fielding
 choose the best pace for a running event, so that they can sustain their running and improve on a personal target show control at take-off in jumping activities show accuracy and good technique when throwing for distance organise and manage an athletic event well; understand how stamina and power help people to perform well in different athletic activities identify good athletic performance and explain why it is good, using agreed criteria 	 choose and perform skills and strategies effectively find solutions to problems and challenges plan, implement and refine the strategies they use adapt the strategies as necessary work increasingly well in a group or in a team where roles and responsibilities are understood prepare physically and organisationally for challenges they are set, taking into account the group's safety identify what they do well, as individuals and as a group suggest ways to improve 	 strike a bowled ball; use a range of fielding skills, eg catching, throwing, bowling, intercepting, with growing control and consistency work collaboratively in pairs, group activities and small-sided games use and apply the basic rules consistently and fairly understand and implement a range of tactics in games recognise the activities and exercises that need including in a warm up identify their own strengths and suggest practices to help them improve

Art



Knowledge, Skills and Understanding breakdown for

Art

Year 6

Drawing

- Do their sketches communicate emotions and a sense of self with accuracy and imagination?
- Can they explain why they have combined different tools to create their drawings?
- Can they explain why they have chosen specific drawing techniques?

- Painting
- Can they explain what their own style is?
- Can they use a wide range of techniques in their work?
- Can they explain why they have chosen specific painting techniques?

Printing

- Can they overprint using different colours?
- Do they look very carefully at the methods they use and make decisions about the effectiveness of their printing methods?

Sketch books

- Do their sketch books contain detailed notes, and quotes explaining about items?
- Do they compare their methods to those of others and keep notes in their sketch books?
- Do they combine graphics and text based research of commercial design, for example magazines etc., to influence the layout of their sketch books.
- Do they adapt and refine their work to reflect its meaning and purpose, keeping notes and annotations in their sketch books?

3D/ Textiles

- Can they create models on a range of scales?
- Can they create work which is open to interpretation by the audience?
- Can they include both visual and tactile elements in their work?

Collage

- Can they justify the materials they have chosen?
- Can they combine pattern, tone and shape?

Use of IT

- Do they use software packages to create pieces of digital art to design.
- Can they create a piece of art which can be used as part of a wider presentation?

Knowledge

- Can they make a record about the styles and qualities in their work?
- Can they say what their work is influenced by?
- Can they include technical aspects in their work, e.g. architectural design?





Knowledge, Skills and Understanding breakdown for Design and Technology

Year 6

Developing, planning an ideas	<u> </u>	Working with tools, equipment, materials and components to make quality products		Evaluating processes and products		
 Can they use a range of information to inform their design? Can they use market research to inform plans? Can they work within constraints? Can they follow and refine their plan if necessary? Can they justify their plan to someone else? Do they consider culture and society in their designs? Can they is tools and materials precisely? Can they use market research to inform plans? Can they solve and refine their plan if necessary? Do they consider culture and society in their designs? Can they is tools and materials precisely? Can they use market research to inform plans? Can they is tools and materials precisely? Do they change the way they are working if needed? How well do they test and evaluate their final product? What would improve it? Would different resources have improved their product? Would they need more or different information to make it even better? Does their product meet all design criteria? Did they consider the use of the product when selecting materials? 						
 Cooking and nutrition Can they explain how their product should be stored with reasons? Can they set out to grow their own products with a view to making a salad, taking account of time required to grow different foods? 	 Textiles Have they thought about how their product could be sold? Have they given considered thought about what would improve their product even more? 	 Breadth of study Electrical and mechanical components Can they use different kinds of circuit in their product? Can they think of ways in which adding a circuit would improve their product? 	 Stiff and flexible sheet materials Can they justify why they selected specific materials? How have they ensured that their work is precise and accurate? Can they hide joints so as to improve the look of their product? 	 Mouldable materials Can they justify why the chosen material was the best for the task? Can they justify design in relation to the audience? 		



Knowledge, Skills and Understanding breakdown for Music

Year 6

Performing

- Can they sing a harmony part confidently and accurately?
- Can they perform parts from memory?
- Can they perform using notations?
- Can they take the lead in a performance?
- Can they take on a solo part?
- Can they provide rhythmic support?

Composing (incl notation)

- Can they use a variety of different musical devices in their composition? (incl melody, rhythms and chords)
- Do they recognise that different forms of notation serve different purposes?
- Can they use different forms of notation?
- Can they combine groups of beats?

Appraising

- Can they refine and improve their work?
- Can they evaluate how the venue, occasion and purpose affects the way a piece of music is created?
- Can they analyse features within different pieces of music?
- Can they compare and contrast the impact that different composers from different times will have had on the people of the time?

- Can they perform a piece of music which contains two (or more) distinct melodic or rhythmic parts, knowing how the parts will fit together?
- Can they show how a small change of tempo can make a piece of music more effective?
- Do they use the full range of chromatic pitches to build up chords, melodic lines and bass lines?
- Can they appraise the introductions, interludes and endings for songs and compositions they have created?



Knowledge, Skills and Understanding breakdown for Foreign Languages

Years 5 and 6

Listening and **Reading and** Speaking Writing responding responding Can they hold a Can they write a Do they • Can they understand longer understand a short paragraph of simple conversation with story or factual text about 3-4 simple passages made up sentences? of familiar at least 3-4 and note some of language in simple the main points? • Can they adapt exchanges? sentences? and substitute • Can they use their • Can they use • Can they identify knowledge of context to work out individual words grammar to adapt the main points unfamiliar words? and set phrases? and some details? and substitute • Can they use a single words and dictionary or phrases? glossary to check words they have learnt? Spoken at near normal Their pronunciation is They will draw largely on generally accurate and speed with no memorised language. interference. May need they show some some items to be consistency in their repeated. intonation.