



## Y3 End of Year Expectations

Reading	Writing
<ul style="list-style-type: none"><li>• Apply knowledge of root words, prefixes and suffixes to read aloud and to understand the meaning of unfamiliar words</li><li>• Read further exception words, noting the unusual correspondences between spelling and sound, and where these occur in the word</li><li>• Attempt pronunciation of unfamiliar words drawing on prior knowledge of similar looking words</li><li>• Experience and discuss a range of fiction, poetry, plays, non-fiction and reference books or textbooks</li><li>• Know that non-fiction books are structured in different ways and be able to use them effectively</li><li>• Begin to understand that narrative books are structured in different ways, for example, quest stories and stories with dilemmas</li><li>• Ask questions to improve understanding of a text</li><li>• Predict what might happen from details stated</li><li>• Draw inferences such as inferring characters' feelings, thoughts and motives from their actions</li><li>• Use dictionaries to check the meaning of unfamiliar words</li><li>• Identify main idea of a text</li><li>• Identify how structure, and presentation contribute to the meaning of texts</li><li>• Retrieve and record information from non-fiction</li><li>• Discuss books, poems and other works that are read aloud and independently, taking turns and listening to others' opinions</li><li>• Explain and discuss understanding of books, poems and other material, both those read aloud and those read independently</li><li>• Prepare poems to read aloud and to perform, showing understanding through intonation, tone, volume and action</li></ul>	<ul style="list-style-type: none"><li>• Spell words with additional prefixes and suffixes and understand how to add them to root words, for example – form nouns using super, anti, auto</li><li>• Recognise and spell additional homophones, for example – he'll, heel, heal</li><li>• Use the first two or three letters of a word to check its spelling in a dictionary</li><li>• Spell correctly word families based on common words, for example – solve, solution, solver</li><li>• Spell identified commonly misspelt words from Year 3 and 4 word list</li><li>• Make analogies from a word already known to apply to an unfamiliar word</li><li>• Identify the root in longer words</li><li>• Use the diagonal and horizontal strokes that are needed to join letters</li><li>• Understand which letters, when adjacent to one another, are best left unjoined</li><li>• Increase the legibility, consistency and quality of handwriting</li><li>• Look at and discuss models of writing of the text type, purpose and audience to be written, noting: structure; grammatical features and use of vocabulary</li><li>• Compose sentences using a wider range of structures linked to the grammar objectives</li><li>• Write a narrative with a clear structure, setting, characters and plot</li><li>• Write a non-narrative using simple organisational devices such as headings and sub-headings</li><li>• Suggest improvement to writing through assessing writing with peers and self assessment</li><li>• Make improvements by proposing changes to grammar and vocabulary to improve consistency, e.g. the accurate use of pronouns in sentences</li><li>• Use a range of sentences with more than one clause by using a wider range of conjunctions, e.g. <i>when, if, because, although</i></li><li>• Use the perfect form of verbs to mark relationships of time and cause</li><li>• Use conjunctions, adverbs and prepositions to express time and cause</li></ul>

	<ul style="list-style-type: none"> <li>• Proof-read to check for errors in spelling and punctuation errors</li> </ul>
<b>Speaking &amp; Listening</b>	<b>Maths</b>
<ul style="list-style-type: none"> <li>• Sequence and communicate ideas in an organised and logical way in complete sentences as required</li> <li>• Vary the amount of detail and choice of vocabulary dependent on the purpose and audience</li> <li>• Participate fully in paired and group discussions</li> <li>• Show understanding of the main points in a discussion</li> <li>• Start to show awareness of how and when Standard English is used</li> <li>• Retell a story using narrative language and added relevant detail</li> <li>• Show they have listened carefully through making relevant comments</li> <li>• Formally present ideas or information to an audience</li> <li>• Recognise that meaning can be expressed in different ways dependent on the context</li> <li>• Perform poems from memory adapting expression and tone as appropriate</li> <li>• Perform poems from memory adapting expression and tone as appropriate</li> <li>• Perform poems from memory adapting expression and tone as appropriate</li> </ul>	<ul style="list-style-type: none"> <li>• Compare and order numbers to 1000 and read and write numbers to 1000 in numerals and words</li> <li>• Count from 0 in multiples of 4, 8, 50 and 100</li> <li>• Recognise the value of each digit in a 3-digit number</li> <li>• Understand and count in tenths, and find the fractional value of a given set</li> <li>• Add and subtract fractions with a common denominator</li> <li>• Derive and recall multiplication facts for 3, 4 and 8x multiplication tables</li> <li>• Add and subtract mentally combinations of 1-digit and 2-digit numbers</li> <li>• Add and subtract numbers with up to 3-digits using formal written methods</li> <li>• Write and calculate mathematical statements for multiplication and division; including 2-digit number with a 1-digit number (from multiplication tables they know, ie, 2, 3, 4, 5, 8 and 10)</li> <li>• Solve number problems using one and two step operations</li> <li>• Identify right angles; compare other angles to being greater or smaller than a right angle</li> <li>• Identify horizontal and vertical lines and pairs of perpendicular and parallel lines</li> <li>• Tell time to nearest minute and use specific vocabulary: seconds, am and pm</li> <li>• Measure, compare, add and subtract using common metric measures</li> <li>• Solve one-step and two step problems using information presented in scaled bar charts, pictograms and tables</li> </ul>



## Y4 End of Year Expectations

Reading	Writing
<ul style="list-style-type: none"><li>• Apply knowledge of root words, prefixes and suffixes to read aloud and to understand the meaning of unfamiliar words</li><li>• Read further exception words, noting the unusual correspondences between spelling and sound, and where these occur in the word</li><li>• Attempt pronunciation of unfamiliar words drawing on prior knowledge of similar looking words</li><li>• Know which books to select for specific purposes, especially in relation to science, history and geography learning</li><li>• Use dictionaries to check the meaning of unfamiliar words</li><li>• Discuss and record words and phrases that writers use to engage and impact on the reader</li><li>• Know and recognise some of the literary conventions in text types covered</li><li>• Begin to understand simple themes in books</li><li>• Prepare poems to read aloud and to perform, showing understanding through intonation, tone, volume and action</li><li>• Explain the meaning of words in context</li><li>• Ask questions to improve understanding of a text</li><li>• Infer meanings and begin to justify them with evidence from the text</li><li>• Predict what might happen from details stated and deduced information</li><li>• Identify how the writer has used precise word choices for effect to impact on the reader</li><li>• Identify some text type organisational features, for example, narrative, explanation, persuasion</li><li>• Retrieve and record information from non-fiction</li><li>• Make connections with prior knowledge and experience</li><li>• Begin to build on others' ideas and opinions about a text in discussion</li><li>• Explain why text types are organised in a certain way</li></ul>	<ul style="list-style-type: none"><li>• Spell words with additional prefixes and suffixes and understand how to add them to root words. for example – ation, ous, ion, ian</li><li>• Recognise and spell additional homophones, for example – accept and except, whose and who's</li><li>• Use the first two or three letters of a word to check its spelling in a dictionary</li><li>• Spell identified commonly misspelt words from Year 3 and 4 word list</li><li>• Use the diagonal and horizontal strokes that are needed to join letters</li><li>• Understand which letters, when adjacent to one another, are best left unjoined</li><li>• Increase the legibility, consistency and quality of their handwriting: down strokes of letters are parallel and equidistant; lines of writing are spaced sufficiently so that the ascenders and descenders of letters do not touch</li><li>• Compose sentences using a wider range of structures, linked to the grammar objectives</li><li>• Orally rehearse structured sentences or sequences of sentences</li><li>• Begin to open paragraphs with topic sentences</li><li>• Write a narrative with a clear structure, setting, characters and plot</li><li>• Make improvements by proposing changes to grammar and vocabulary to improve consistency, e.g. the accurate use of pronouns in sentences</li><li>• Use a range of sentences with more than one clause</li><li>• Use appropriate nouns or pronouns within and across sentences to support cohesion and avoid repetition</li><li>• Use fronted adverbials, for example, 'Later that day, I went shopping.'</li><li>• Use expanded noun phrases with modifying adjectives and prepositional phrases, for example, 'The strict teacher with curly hair'</li><li>• Use other punctuation in direct speech, including a comma after the reporting clause; use apostrophes to mark plural possession; and use commas after fronted adverbials</li></ul>

Speaking & Listening	Maths
<ul style="list-style-type: none"> <li>• Ask questions to clarify or develop understanding</li> <li>• Sequence, develop and communicate ideas in an organised, logical way in complete sentences as required</li> <li>• Show understanding of the main points and significant details in a discussion</li> <li>• Increasingly adapt what is said to meet the needs of the audience/listener</li> <li>• Vary the use and choice of vocabulary dependent on the audience and purpose</li> <li>• Show understanding of how and why language choices vary in different contexts</li> <li>• Present writing to an audience, using appropriate intonation and controlling the tone and volume so that the meaning is clear</li> <li>• Justify answers with evidence</li> <li>• Understand when the context requires the use of Standard English</li> <li>• Perform poems or plays from memory, conveying ideas about characters and situations by adapting expression and tone</li> </ul>	<ul style="list-style-type: none"> <li>• Recall all multiplication facts to 12 x 12</li> <li>• Round any number to the nearest 10, 100 or 1000 and decimals with one decimal place to the nearest whole number</li> <li>• Count backwards through zero to include negative numbers</li> <li>• Compare numbers with the same number of decimal places up to 2 decimal places</li> <li>• Recognise and write decimal equivalents of any number of tenths or hundredths</li> <li>• Add and subtract with up to 4 decimal places using formal written methods of columnar addition and subtraction</li> <li>• Divide a 1 or 2-digit number by 10 or 100 identifying the value of the digits in the answer as units, tenths and hundredths</li> <li>• Multiply 2-digit and 3-digit numbers by a 1-digit number using formal written layout</li> <li>• Solve addition and subtraction two-step problems in context and solve problems involving multiplication and division</li> <li>• Solve simple measures and money problems involving fractions and decimals to 2 decimal places</li> <li>• Compare and classify geometrical shapes, including quadrilaterals and triangles, based on their properties and sizes</li> <li>• Know that angles are measured in degrees and identify acute and obtuse angles and compare and order angles up to two right angles by size</li> <li>• Measure and calculate the perimeter of a rectilinear figure in centimetres and metres</li> <li>• Read, write and convert between analogue and digital 12 and 24 hour clocks</li> <li>• Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs</li> </ul>



## Y5 End of Year Expectations

Reading	Writing
<ul style="list-style-type: none"><li>• Apply knowledge of root words, prefixes and suffixes to read aloud and to understand the meaning of unfamiliar words.</li><li>• Read further exception words, noting the unusual correspondences between spelling and sound, and where these occur in the word.</li><li>• Attempt pronunciation of unfamiliar words drawing on prior knowledge of similar looking words.</li><li>• Re-read and read ahead to check for meaning.</li><li>• Become familiar with and talk about a wide range of books, including myths, legends and traditional stories &amp; books from other cultures &amp; traditions &amp; know their features.</li><li>• Read non-fiction texts and identify purpose and structures and grammatical features and evaluate how effective they are.</li><li>• Identify significant ideas, events and characters and discuss their significance.</li><li>• Learn poems by heart for example, narrative verse, haiku.</li><li>• Prepare poems and plays to read aloud and to perform, showing understanding through intonation, tone, volume and action.</li><li>• Use meaning-seeking strategies to explore the meaning of words in context.</li><li>• Use meaning – seeking strategies to explore the meaning of idiomatic and figurative language.</li><li>• Identify and comment on writer's use of language for effect for example, precisely chosen adjectives, similes and personification.</li><li>• Identify grammatical features used by writer – rhetorical questions, varied sentence lengths, varied sentence starters, empty words – to impact on the reader.</li><li>• Draw inferences such as inferring characters' feelings, thoughts and motives from their actions.</li><li>• Justify inferences with evidence from the text.</li><li>• Make predictions from what has been read.</li><li>• Summarise the main ideas drawn from a text.</li><li>• Identify the effect of the context on a text for example, historical or other cultures.</li><li>• Identify how language, structure and presentation contribute to the meaning of a text.</li><li>• Express a personal point of view about a text, giving reasons.</li><li>• Make connections between other similar texts, prior knowledge and experience.</li><li>• Compare different versions of texts and talk about their differences and similarities.</li><li>• Listen to and build on others' ideas and opinions about a text.</li><li>• Present an oral overview or summary of a text.</li><li>• Present the author's viewpoint of a text.</li><li>• Present a personal point of view based on what has been read.</li><li>• Listen to others' personal point of view.</li><li>• Explain a personal point of view and give reasons.</li><li>• Know the difference between fact and opinion.</li><li>• Use knowledge of structure of text type to find key information.</li><li>• Use text marking to identify key information in a text.</li></ul>	<ul style="list-style-type: none"><li>• Form verbs with prefixes for example, dis, de, mis, over and re.</li><li>• Convert nouns or adjectives into verbs by adding a suffix for example, ate, ise, ify.</li><li>• Understand the general rules for adding prefixes and suffixes above.</li><li>• Spell some words with 'silent' letters, e.g. <i>knight, psalm, solemn</i>.</li><li>• Distinguish between homophones and other words which are often confused.</li><li>• Spell identified commonly misspelt words from Year 5 and 6 word list.</li><li>• Use the first three or four letters of a word to check spelling, meaning or both of these in a dictionary.</li><li>• Use a thesaurus.</li><li>• Use a range of spelling strategies.</li><li>• Choose which shape of a letter to use when given choices and deciding, as part of their personal style, whether or not to join specific letters.</li><li>• Choose the writing implement that is best suited for a task (e.g. quick notes, letters).</li><li>• Know the audience for and purpose of the writing.</li><li>• Use the features and structures of text types taught so far.</li><li>• Use grammatical features and vocabulary appropriate for the text types taught so far.</li><li>• Start sentences in different ways.</li><li>• Use sentence starters to highlight the main idea.</li><li>• Develop characters through action and dialogue.</li><li>• Establish viewpoint as the writer through commenting on characters or events.</li><li>• Show how grammar and vocabulary choices create impact on the reader.</li><li>• Choose vocabulary to engage and impact on the reader.</li><li>• Use stylistic devices to create effects in writing, for example, simile, metaphor, personification.</li><li>• Add well-chosen detail to interest the reader.</li><li>• Summarise a paragraph or event.</li><li>• Organise writing into paragraphs to show different information or events.</li><li>• Use cohesive devices (connecting adverbs and adverbials) to link ideas within paragraphs.</li><li>• Use modal verbs or adverbs to indicate degrees of possibility.</li><li>• Use relative clauses beginning with <i>who, which, where, when, whose, that</i> or with an implied (i.e. omitted) relative pronoun.</li><li>• Use commas to clarify meaning or avoid ambiguity in writing.</li><li>• Use brackets, dashes or commas to indicate parenthesis.</li><li>• Assess the effectiveness of their own and others' writing.</li><li>• Suggest changes to vocabulary, grammar and punctuation to enhance effects and clarify meaning.</li><li>• Ensure the consistent and correct use of tense throughout a piece of writing.</li><li>• Ensure correct subject and verb agreement when using singular and plural.</li><li>• Distinguish between the language of speech and writing.</li><li>• Distinguish between the formal and informal spoken and written language.</li><li>• Proof-read for spelling and punctuation errors.</li><li>• Perform their own compositions, using appropriate intonation, volume, and movement so that meaning is clear.</li></ul>

<ul style="list-style-type: none"> <li>• Make notes from text marking.</li> </ul>	
Speaking & Listening	Maths
<ul style="list-style-type: none"> <li>• Engage the interest of the listener by varying their expression and vocabulary.</li> <li>• Adapt spoken language to the audience, purpose and context.</li> <li>• Explain the effect of using different language for different purposes.</li> <li>• Develop ideas and opinions with relevant detail.</li> <li>• Express ideas and opinions, justifying a point of view.</li> <li>• Show understanding of the main points, significant details and implied meanings in a discussion.</li> <li>• Listen carefully in discussions, make contributions and ask questions that are responsive to others' ideas and views.</li> <li>• Begin to use Standard English in formal situations.</li> <li>• Begin to use hypothetical language to consider more than one possible outcome or solution.</li> <li>• Perform own compositions, using appropriate intonation and volume so that meaning is clear.</li> <li>• Perform poems or plays from memory, making careful choices about how they convey ideas about characters and situations by adapting expression and tone.</li> <li>• Understand and begin to select the appropriate register according to the context.</li> </ul>	<ul style="list-style-type: none"> <li>• Count forwards and backwards in steps of power 10 for any given number up to 1,000,000</li> <li>• Recognise and use thousandths and relate them to tenths, hundreds and decimal equivalents</li> <li>• Recognise mixed numbers and improper fractions and convert from one to the other</li> <li>• Read and write decimal numbers as fractions, for example, <math>0.47 = \frac{47}{100}</math></li> <li>• Recognise the per cent symbol (%) and understand per cent relates to number of parts per hundred</li> <li>• Write percentages as a fraction with denominator hundred, and as a decimal fraction</li> <li>• Compare and add fractions whose denominators are all multiples of the same number</li> <li>• Multiply and divide numbers mentally drawing upon known facts up to <math>12 \times 12</math></li> <li>• Round any number to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000</li> <li>• Round decimals with 2dp to the nearest whole number and to 1 decimal place</li> <li>• Recognise and use square numbers and cube numbers and the notation for squared (<math>^2</math>) and cubed (<math>^3</math>)</li> <li>• Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000</li> <li>• Multiply number up to 4-digit by a 1 or 2-digit number using formal written methods, including long multiplication for 2-digit numbers</li> <li>• Divide numbers up to 4-digits by 1-digit numbers</li> <li>• Solve problems involving multiplication and division where large numbers are used by decomposing them into factors</li> <li>• Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why; solve problems involving 3 decimal places and problems which require knowledge of percentages and decimal equivalents</li> <li>• Know angles are measured in degrees: estimate and compare acute; obtuse and reflex angles</li> <li>• Draw given angles and measure them in degrees (<math>^\circ</math>)</li> <li>• Convert between different units of metric measures and estimate volume and capacity</li> <li>• Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres</li> <li>• Calculate and compare the area of squares and rectangles including using standard units (<math>\text{cm}^2</math> and <math>\text{m}^2</math>)</li> <li>• Solve comparison, sum and difference problems using information presented in a line graph</li> </ul>



## Y6 End of Year Expectations

Reading	Writing
<ul style="list-style-type: none"><li>• Apply knowledge of root words to read aloud and to understand the meaning of unfamiliar words.</li><li>• Apply knowledge of prefixes and suffixes to read aloud and to understand the meaning of unfamiliar words.</li><li>• Use combined knowledge of phonemes and word derivations to pronounce words correctly. for example: arach<u>n</u>oph<u>o</u>b<u>i</u>a, aud<u>i</u>ence</li><li>• Attempt pronunciation of unfamiliar words drawing on prior knowledge of similar looking words.</li><li>• Read fluently, using punctuation to inform meaning.</li><li>• Read and become familiar with a wide range of books, including modern fiction, fiction from our literary heritage, and books from other cultures and traditions.</li><li>• Read books that are structured in different ways.</li><li>• Recognise texts that contain features from more than one text type.</li><li>• Consider and evaluate how effectively texts are structured and laid out.</li><li>• Read non-fiction texts to support other curriculum areas.</li><li>• Read closely to ensure understanding.</li><li>• Recommend books that they have read to their peers, giving reasons for their choices.</li><li>• Identify and discuss themes in a range of writing and across longer texts.</li><li>• Identify and discuss the conventions of different text types.</li><li>• Identify key points in an appropriate text.</li><li>• Learn a range of poetry by heart for example, narrative verse, sonnet.</li><li>• Prepare poems and plays to read aloud and to perform, showing understanding through intonation, tone, volume and action.</li><li>• Identify and comment on writer's choice of vocabulary, giving examples and explanation.</li><li>• Identify and explain how writers use grammatical features for effect for example, the use of short sentences to build tension.</li><li>• Show awareness of the writers' craft by commenting on use of language, grammatical features and structure of texts.</li><li>• Express a personal point of view about a text, giving reasons linked to evidence from texts.</li><li>• Raise queries about texts.</li><li>• Make connections between other similar texts, prior knowledge and experience and explain the links.</li><li>• Compare different versions of texts and explain the differences and similarities.</li><li>• Listen to others' ideas and opinions about a text.</li><li>• Build on others' ideas and opinions about a text in discussion.</li><li>• Explain and comment on explicit and implicit points of view.</li><li>• Summarise key information from different parts of a text.</li><li>• Recognise the writer's point of view and discuss it.</li></ul>	<ul style="list-style-type: none"><li>• Convert verbs into nouns by adding suffixes. for example, tion, ure.</li><li>• Distinguish between homophones and other words which are often confused.</li><li>• Spell identified commonly misspelt words from Year 5 and 6 word list.</li><li>• Understand that the spelling of some words needs to be learnt specifically.</li><li>• Use dictionaries to check the spelling and meaning of words</li><li>• Use the first three or four letters of a word to check spelling, meaning or both of these in a dictionary</li><li>• Use a thesaurus.</li><li>• Use a range of spelling strategies.</li><li>• Choose which shape of a letter to use when given choices and deciding, as part of their personal style, whether or not to join specific letters.</li><li>• Choose the writing implement that is best suited for a task (e.g. quick notes, letters).</li><li>• Identify the audience for and purpose of the writing.</li><li>• Choose the appropriate form and register for the audience and purpose of the writing.</li><li>• Use grammatical structures/features and choose vocabulary appropriate to the audience, purpose and degree of formality to make meaning clear and create effect.</li><li>• Use a range of sentence starters to create specific effects, for example, adverbials, conjunctions, ing, ed.</li><li>• Use developed noun phrases to add detail to sentences.</li><li>• Use the passive voice to present information with a different emphasis.</li><li>• Use commas to mark phrases and clauses.</li><li>• Sustain and develop main ideas logically in narrative and non-narrative writing.</li><li>• Use character, dialogue and action to advance events in narrative writing.</li><li>• Summarise text, conveying key information.</li><li>• Write paragraphs with a topic sentence which clearly signal a change in, for example, subject, time, place, event</li><li>• Use organisational and presentational devices to structure text and to guide the reader, for example, headings, bullet points, underlining</li><li>• Assess the effectiveness of their own and others' writing</li><li>• Suggest changes to vocabulary, grammar and punctuation to enhance effects and clarify meaning.</li><li>• Ensure the consistent and correct use of tense throughout a piece of writing.</li><li>• Ensure correct subject and verb agreement when using singular and plural.</li><li>• Distinguish between the language of speech and writing.</li><li>• Distinguish between the correct subject and verb agreement when using singular and plural.</li><li>• Distinguish between the language of speech and writing and choose the appropriate register.</li><li>• Proof-read for spelling and punctuation errors.</li><li>• Perform their own compositions, using appropriate intonation, volume, and movement so that meaning is clear.</li></ul>

<ul style="list-style-type: none"> <li>• Present a personal point of view based on what has been read.</li> <li>• Present a counter-argument in response to others' points of view.</li> <li>• Provide reasoned justifications for their views.</li> <li>• Refer to the text to support opinion.</li> <li>• Distinguish between statements of fact and opinion.</li> <li>• Find information using skimming to establish main idea.</li> <li>• Use scanning to find specific information.</li> <li>• Text mark to make research efficient and fast.</li> <li>• Organise information or evidence appropriately.</li> </ul>	
Speaking & Listening	Maths
<ul style="list-style-type: none"> <li>• Talk confidently and fluently in a range of situations, using formal and Standard English as appropriate.</li> <li>• Ask questions to develop ideas and make contributions that take account of others' views.</li> <li>• Explain ideas and opinions giving reasons and evidence.</li> <li>• Take an active part in discussions, taking different roles.</li> <li>• Listen to and consider the views and opinions of others in discussions.</li> <li>• Make contributions to discussions, evaluating others' ideas and responding to them.</li> <li>• Sustain and argue a point of view in a debate, using formal language of persuasion.</li> <li>• Express possibilities using hypothetical and speculative language in science and when discussing reading.</li> <li>• Engage listeners through choice of vocabulary and register according to the context.</li> <li>• Perform own compositions, using appropriate intonation and volume and expression so that literal and implied meaning is made clear.</li> <li>• Perform poems or plays from memory, making deliberate choices about how they convey ideas about characters, contexts and atmosphere.</li> </ul>	<ul style="list-style-type: none"> <li>• Use negative numbers in context, and calculate intervals across zero</li> <li>• Round any whole number to a required degree of accuracy and solve problems which require answers to be rounded to a specific degree of accuracy</li> <li>• Solve problems involving the relative sizes of two quantities where the missing values can be found by using integer multiplication and division facts</li> <li>• Use common factors to simplify fractions; use common multiples to express fractions in the same denomination</li> <li>• Solve problems involving the calculation of percentages, (for example, of measures) such as 20% of 440 and the use of percentages for comparison</li> <li>• Multiply 1-digit numbers with up to two decimal places by whole numbers</li> <li>• Perform mental calculations, including with mixed operations with large numbers</li> <li>• Divide numbers up to 4-digits by a 2-digit whole number using formal written methods of long division and interpret remainder in various ways</li> <li>• Use knowledge of order of operations to carry out calculations involving all four operations</li> <li>• Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions</li> <li>• Multiply simple pairs of proper fractions, writing the answer in its simplest form</li> <li>• Divide proper fractions by whole numbers (<math>\frac{1}{8} \div 2 = \frac{1}{16}</math>)</li> <li>• Associate a fraction with division and calculate decimal fraction equivalents (for example, 0.375 for <math>\frac{3}{8}</math>)</li> <li>• Express missing number problems algebraically</li> <li>• Find pairs of numbers that satisfy number sentences involving two unknowns</li> <li>• Recognise, describe and build simple 3D shapes, including making nets</li> <li>• Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangle, quadrilateral and regular polygons</li> <li>• Illustrate and name parts of circles, including radius, diameter and circumference and know that the radius is half the diameter</li> <li>• 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</li> <li>• Calculate the area of a parallelogram and triangles and calculate, estimate and compare volume of cubes and cuboids using standard units</li> <li>• Interpret and construct pie charts and line graphs and use these to solve problems</li> </ul>