By the <u>end of Y6</u>, a child should be able to:

Reading:

Objectives	To read words accurately	To understand texts
Skills required to meet achieve the objective	• Apply knowledge of root words, prefixes and suffixes. (Note: this should be through normal reading rather than direct teaching.)	• Recommend books to peers, giving reasons for choices. • Identify and discuss themes and conventions in and across a wide range of writing. • Make comparisons within and across books. • Learn a wide range of poetry by heart. • Prepare 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. • Check that the book makes sense, discussing understanding and exploring the meaning of words in context. • Ask questions to improve understanding. • Draw inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence. • Predict what might happen from details stated and implied. • Summarise the main ideas drawn from more than one paragraph, identifying key details that support the main ideas. • Identify how language, structure and presentation contribute to meaning. • Discuss and evaluate how authors use language, including figurative language, considering the impact on the reader. • Retrieve and record information from non-fiction. • Participate in discussion about books, taking turns and listening and responding to what others say.

Writing:

Area	To write with purpose	To use imaginative description	To organise writing appropriately	To use paragraphs	To use sentences appropriately		To present neatly
Skills required	Identify the audience for writing. • Choose the appropriate form of writing using the main features identified in reading. • Note, develop and research ideas. • Plan, draft, write, edit and improve.	• Use the techniques that authors use to create characters, settings and plots. • Create vivid images by using alliteration, similes, metaphors and personification. • Interweave descriptions of characters, settings and atmosphere with dialogue.	• Guide the reader by using a range of organisational devices, including a range of connectives. • Choose effective grammar and punctuation and propose changes to improve clarity. • Ensure correct use of tenses throughout a piece of writing	• Write paragraphs that give the reader a sense of clarity. • Write paragraphs that make sense if read alone. • Write cohesively at length.	• Write sentences that include: relative clauses • modal verbs • relative pronouns • brackets • parenthesis • a mixture of active and passive voice • a clear subject and object • hyphens, colons and semi colons • bullet points.		• Write fluently and legibly with a personal style.

Area	To spell correctly		To punctuate accurately		To analyse and present writing
Skills required	• Use prefixes, applying guidelines for adding them. • Spell some words with silent letters (knight, psalm solemn). • Distinguish between homophones and other words that are often confused. • Use knowledge of morphology and etymology in spelling and understand that some words need to be learned specifically. • Use dictionaries to check spelling and meaning of words. • Use the first three or four letters of a word to look up the meaning or spelling of words in a dictionary. • Use a thesaurus.		• Develop understanding of writing 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 (i.e. omitted) relative pronoun. • 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 semi-colons, colons or dashes to mark boundaries between independent clauses. • Using a colon to introduce a list. • Punctuating bullet points consistently.		• Use and understand grammatical terminology when discussing writing and reading: **Year 5** • relative clause, modal verb, relative pronoun, parenthesis, bracket, dash, determiner, cohesion, ambiguity. **Year 6** • active and passive voice, subject and object, hyphen, synonym, colon, semi-colon, bullet points. • Perform compositions, using appropriate intonation and volume.

Maths:

Please note that the objectives are in a different order to Milestones 1 and 2; this is simply to allow for formatting

Area	To know and use numbers		To add and subtract
Skills required	• Read numbers up to 10 000 000. • Use negative numbers in context and calculate intervals across zero. • Write numbers up to 10 000 000 • Read Roman numerals to 1000 (M) and recognise years written in Roman numerals. • Order and compare numbers up to 10 000 000. • Round any whole number to a required degree of accuracy. • Determine the value of each digit in any number. • Solve number and practical problems.		• Solve multi-step addition and subtraction problems in contexts, deciding which operations and methods to use and why. • Add and subtract whole numbers with more than 4 digits, including using formal written methods. (columnar addition and subtraction) • Add and subtract numbers mentally with increasingly large numbers. • Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy. • Add and subtract negative integers.
Area	To understand the properties of shapes	To describe position, direction and movement	To use measures
Skills required	• Identify 3-D shapes, including cubes and other cuboids, from 2-D representations. • Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. • Draw given angles, and measure them in degrees (°). • Identify: • Angles at a point and one whole turn (total 360°). • Angles at a point on a straight line and a turn (total 180°). • Other multiples of 90°. • Use the properties of rectangles to deduce related facts and find missing lengths and angles. • Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. • 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.	• Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed. • 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.	• Convert between different units of metric measure. • Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints. • Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres. • Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes. • Estimate volume and capacity. • Solve problems involving converting between units of time. • Use all four operations to solve problems involving measure (for example, length, mass, volume, money) using decimal notation, including scaling. • Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three 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 three 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.

Area	To multiply and divide	Fractions (including decimals and percentages, ratio and proportion)	
	Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign. • Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates. • Use knowledge of the order of operations to carry out calculations involving the four operations. • 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. • Estimate and use inverse operations and rounding to check answers to a calculation. • Identify common factors, common multiples and prime numbers. • Establish whether a number up to 100 is prime and recall prime numbers up to 19. • Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. • Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3). Solve problems involving multiplication and division including using knowledge of factors and multiples, squares and cubes.	• Compare and order fractions whose denominators are all multiples of the same number. • Compare and order fractions, including fractions > 1. • Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number. • Round decimals with two decimal places to the nearest whole number and to one decimal place. • Read, write, order and compare numbers with up to three decimal places. • Identify the value of each digit in numbers given to three decimal places. • Solve problems involving number up to three decimal places. • Recognise the percent symbol (%) and understand that percent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal. • Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths. • Read and write decimal numbers as fractions. • Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. • Use common factors to simplify fractions; use common multiples to express fractions in the same denomination. • Associate a fraction with division and calculate decimal fraction equivalents. • Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts. • Add and subtract fractions with the same denominator and denominators that are multiples of the same number. • Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. • Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams. • Multiply simple pairs of proper fractions, writing the answer in its simplest form. • Solve problems which require knowing percentage and decimal equivalents of, 1/2, 1/4, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25. • Divide proper fractions by whole numbers. • Multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places.	**Ratio and proportion** • Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts. • Solve problems involving the calculation of percentages 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.
Area	To use statistics		To use algebra
Skills required	• Solve comparison, sum and difference problems using information presented in a line graph. • Complete, read and interpret information in tables, including timetables. • Interpret and construct pie charts and line graphs and use these to solve problems. • Calculate and interpret the mean as an average.		• 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.