



## Whole-School Curriculum Progression Map-Mathematics

Mathematical Vocabulary	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i> Teacher Assessment Framework		KS2 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i>			
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4		
Mathematical Vocabulary	<p>To build up vocabulary that reflects the breadth of their experiences.</p> <p>To extend vocabulary, especially by grouping and naming, exploring the meaning and sounds of new words.</p>	To read and spell mathematical vocabulary, at a level consistent with their increasing word reading and spelling knowledge at year 1.	To read and spell mathematical vocabulary, at a level consistent with their increasing word reading and spelling knowledge at key stage 1.	To read and spell mathematical vocabulary correctly and confidently, using their growing word reading knowledge and their knowledge of spelling.	To read and spell mathematical vocabulary correctly and confidently, using their growing word reading knowledge and their knowledge of spelling.		

Number and Place Value	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i> Teacher Assessment Framework		KS2 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i>				
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4			
Counting	<p>To recite numbers in order to 10. To realise not only objects, but anything can be counted including steps, claps or jumps.</p> <p>To count up to three or four objects by saying one number name for each item. To count out up to six objects from a larger group. To count actions or objects which cannot be moved. To count objects to 10 and beginning to count beyond 10. To count an irregular arrangement of up to ten objects. To estimate how many objects they can see and check by counting them.</p> <p>To count reliably with numbers from one to 20.</p>	<p>To count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. To identify one more and one less than a given number. <i>To count in multiples of twos, fives and tens from different multiples to develop their recognition of patterns in the number system, including varied and frequent practice through increasingly complex questions.</i> <i>To recognise and create repeating patterns with objects and with shapes.</i></p>	<p>To count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward.</p>	<p><i>To continue to count in ones, tens and hundreds, so that pupils become fluent in the order and place value of numbers to 1000.</i> To count from 0 in multiples of 4, 8, 50 and 100.</p>	<p><i>To count in tens and hundreds, and maintain fluency in other multiples through varied and frequent practice.</i> To count in multiples of 6, 7, 9, 25 and 1000. To count backwards through zero to include negative numbers. To find 1000 more or less than a given number.</p>			

Number and Place Value	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i> Teacher Assessment Framework		KS2 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i>			
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4		
Identifying, Representing and Estimating Numbers	<p>To say the number that is one more than a given number.</p> <p>To find one more or one less from a group of up to five objects, then ten objects.</p> <p>To say which number is one more or one less than a given number from one to 20.</p>						
Reading and Writing Numbers	<p>To show an interest in numerals in the environment.</p> <p>To use some number names accurately in play.</p> <p>To recognise some numerals of personal significance.</p> <p>To recognise numerals 1 to 5.</p>	<p>To read and write numbers from 1 to 20 in numerals and words.</p> <p>To count, read and write numbers to 100 in numerals.</p>	<p>To read and write numbers to at least 100 in numerals and in words.</p>	<p>To read and write numbers up to 1000 in numerals and in words.</p>			

Number and Place Value	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i> Teacher Assessment Framework		KS2 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i>			
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4		
Compare and Order Numbers	<p>To compare two groups of objects, saying when they have the same number.</p> <p>To use the language of 'more' and 'fewer' to compare two sets of objects.</p> <p>To place numbers one to 20 in order.</p>		To compare and order numbers from 0 up to 100; use <, > and = signs.	To compare and order numbers up to 1000.	To order and compare numbers beyond 1000.		
Understanding Place Value	To show curiosity about numbers by offering comments or asking questions.		To recognise the place value of each digit in a two-digit number (tens, ones) to <i>become fluent and apply their knowledge of numbers to reason with, discuss and solve problems.</i> To begin to understand zero as a place holder.	To recognise the place value of each digit in a three-digit number (hundreds, tens, ones) and apply partitioning related to place value using varied and increasingly complex problems, building on work in year 2 (for example, $146 = 100 + 40$ and $6, 146 = 130 + 16$ ).	To recognise the place value of each digit in a four-digit number. <i>To begin to extend their knowledge of the number system to include the decimal numbers and fractions that they have met so far.</i>		
Rounding					To round any number to the nearest 10, 100 or 1000.  <i>To connect estimation and rounding numbers to the use of measuring instruments.</i>		

Number and Place Value	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i> Teacher Assessment Framework		KS2 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i>			
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4		
Roman Numerals					To read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.		
Solve Problems	To show an interest in number problems.  To begin to identify own mathematical problems based on own interests and fascinations.	To practise ordinal numbers and solve simple concrete problems.	To use place value and number facts to solve related problems to develop fluency.	To solve number problems and practical problems involving these ideas.	To solve number and practical problems that involve all of the above and with increasingly large positive numbers.		

Addition and Subtraction	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance Non-Statutory Curriculum Guidance Teacher Assessment Framework		KS2 Statutory Curriculum Guidance Non-Statutory Curriculum Guidance			
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4		
Mental Calculations	<p>To find the total of items in two groups by counting all of them.</p> <p>To begin to use the vocabulary involved in adding and subtracting in practical activities and discussion.</p> <p>To add and subtract two single-digit numbers and count on and back to find the answer using quantities and objects.</p>	<p>To add and subtract one-digit and two-digit numbers to 20, including zero.</p> <p>To realise the effect of adding or subtracting zero.</p>	<p>To extend the language of addition and subtraction to include sum and difference.</p> <p>To show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.</p> <p>To add and subtract numbers using an efficient strategy, explaining their method verbally using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones, a two-digit number and tens, two two-digit numbers, add three one-digit numbers.</p>	<p>To add and subtract numbers mentally, including: two-digit numbers, where the answers could exceed 100, a three-digit number and ones, a three-digit number and tens and a three-digit number and hundreds.</p>	<p>To continue to practise both mental methods and columnar addition and subtraction with increasingly large numbers to aid fluency.</p>		

Addition and Subtraction	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i> Teacher Assessment Framework		KS2 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i>			
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4		
Number Bonds		To <i>memorise</i> , represent and use number bonds and related subtraction facts within 20.	To recall all number bonds to and within 10 and use these to reason with and calculate bonds to and within 20, recognising other associated additive relationships.  To recall and use addition and subtraction facts to 20 to become fluent in deriving associative facts (e.g. $10 - 7 = 3$ , $100 - 70 = 30$ ) and derive and use related facts up to 100.				
Written Calculations		To read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.	To begin to record addition and subtraction in columns to support place value and prepare for formal written methods with larger numbers.	To use the understanding of place value and partitioning to enable adding and subtracting numbers with up to three digits, using formal written methods of columnar addition and subtraction to become fluent.	To add and subtract numbers with up to four digits using the formal written methods of columnar addition and subtraction where appropriate.		

Addition and Subtraction	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i> Teacher Assessment Framework		KS2 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i>			
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4		
Inverse Operations, Estimating and Checking Answers			To recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.	To estimate the answer to a calculation and use inverse operations to check answers.	To estimate and use inverse operations to check answers to a calculation.		
Order of Operations							
Solve Problems	To solve problems, including doubling, halving and sharing.	To discuss and solve one-step problems ( <i>in familiar practical contexts</i> ) that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems. <i>Problems include the terms: put together, add, altogether, total, take away, distance between, difference between, more than and less than, so that pupils develop the concept of addition and subtraction and are able to use these operations flexibly.</i>	To solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures applying their increasing knowledge of mental and written methods.				



Multiplication and Division	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance Non-Statutory Curriculum Guidance Teacher Assessment Framework		KS2 Statutory Curriculum Guidance Non-Statutory Curriculum Guidance			
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4		
Mental Calculations			<p>To begin to use other multiplication tables and recall multiplication facts, including using related division facts to perform written and mental calculations.</p> <p>To begin to relate multiplication and division facts to fractions and measures (e.g., <math>40 \div 2 = 20</math>, 20 is a half of 40).</p> <p>To show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot, to develop multiplicative reasoning.</p>	<p>To write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using efficient mental methods, for example, using commutativity and associativity, and progressing to formal reliable written methods of short multiplication and division.</p>	<p>To combine their knowledge of number facts and rules of arithmetic to solve mental and written calculations, e.g. <math>2 \times 6 \times 5 = 10 \times 6 = 60</math>.</p> <p>To practise mental methods and extend this to three-digit numbers to derive associative facts, (e.g. <math>600 \div 3 = 200</math> can be derived from <math>2 \times 3 = 6</math>).</p> <p>To recognise and use factor pairs and commutativity in mental calculations.</p> <p>To use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers.</p>		

Multiplication and Division	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance Non-Statutory Curriculum Guidance Teacher Assessment Framework		KS2 Statutory Curriculum Guidance Non-Statutory Curriculum Guidance			
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4		
Multiplication and Division Facts		<p>To make connections between arrays, number patterns, and counting in twos, fives and tens.</p> <p>Through grouping and sharing small quantities, pupils begin to understand: multiplication and division; doubling numbers and quantities; and finding simple fractions of objects, numbers and quantities.</p>	<p>To use a variety of language to describe multiplication and division.</p> <p>To count from 0 in multiples of 4, 8, 50 and 100.</p> <p>To recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers and use them to solve simple problems, demonstrating an understanding of commutativity as necessary.</p> <p>To connect the 10 multiplication table to place value, and the 5 multiplication table to the divisions on the clock face.</p>	<p>To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables when they are calculating mathematical statements in order to improve fluency.</p> <p>To connect the 2, 4 and 8 multiplication tables through doubling.</p>	<p>To recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math> to aid fluency.</p> <p>To write statements about the equality of expressions (for example, use the distributive law <math>39 \times 7 = 30 \times 7 + 9 \times 7</math> and associative law <math>(2 \times 3) \times 4 = 2 \times (3 \times 4)</math>).</p>		

Multiplication and Division	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i> Teacher Assessment Framework		KS2 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i>			
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4		
Written Calculation			<p>To calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (<math>\times</math>), division (<math>\div</math>) and equals (=) signs.</p> <p><i>To begin to use other multiplication tables and recall multiplication facts, including using related division facts to perform written and mental calculations.</i></p>	<p>To write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using efficient mental methods, for example, using commutativity and associativity, and progressing to formal reliable written methods of short multiplication and division. (included in mental calculation section)</p>	<p>To multiply two-digit and three-digit numbers by a one-digit number using the formal written layout of short multiplication with exact answers.</p> <p><i>To become fluent in the formal written method of short division with exact answers.</i></p>		

Multiplication and Division	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i> Teacher Assessment Framework		KS2 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i>			
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4		
Properties of Numbers							

Multiplication and Division	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i> Teacher Assessment Framework		KS2 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i>			
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4		
Order of Operations							
Solve Problems		To solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.	To solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.	To solve <i>simple</i> problems <i>in contexts</i> , <i>deciding which of the four operations to use and why</i> . These include missing number problems, involving multiplication and division, including <i>measuring</i> and positive integer scaling problems and correspondence problems in which $n$ objects are connected to $m$ objects.	To solve <i>two-step</i> problems <i>in contexts</i> involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems, such as $n$ objects are connected to $m$ objects.		

Fractions, Decimals and Percentages	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance Non-Statutory Curriculum Guidance Teacher Assessment Framework		KS2 Statutory Curriculum Guidance Non-Statutory Curriculum Guidance			
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4		
Counting			To count in fractions up to 10, starting from any number and using the $\frac{1}{2}$ and $\frac{2}{4}$ equivalence on the number line.	To count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by ten.	To count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.		
Recognising, Finding and Naming Fractions		To recognise, find and name a half as one of two equal parts of an object, shape or quantity by solving problems. To recognise, find and name a quarter as one of four equal parts of an object, shape or quantity by solving problems. To connect halves and quarters to the equal sharing and grouping of sets of objects and to measures, as well as recognising and combining halves and quarters as parts of a whole.	To recognise, find, name, identify and write fractions $\frac{1}{3}$ , $\frac{2}{4}$ , $\frac{1}{2}$ and $\frac{3}{4}$ of a length, number, shape, set of objects or quantity and know that all parts must be equal parts of the whole.  To connect unit fractions to equal sharing and grouping, to numbers when they can be calculated, and to measures, finding fractions of lengths, quantities, sets of objects or shapes. They meet $\frac{3}{4}$ as the first example of a non-unit fraction.	To understand the relation between unit fractions as operators (fractions of), and division by integers. To recognise, understand and use fractions as numbers: unit fractions and non-unit fractions with small denominators as numbers on the number line (going beyond 0 -1 and relating this to measure), and deduce relations between them, such as size and equivalence.  To recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.	To make connections between fractions of a length, of a shape and as a representation of one whole or set of quantities. To know that decimals and fractions are different ways of expressing numbers and proportions. To understand the relation between non-unit fractions and multiplication and division of quantities, with particular emphasis on tenths and hundredths.		

Fractions, Decimals and Percentages	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i> Teacher Assessment Framework		KS2 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i>			
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4		
Comparing and Ordering Fractions				To compare and order unit fractions, and fractions with the same denominators.			
Adding and Subtracting Fractions				To add and subtract fractions with the same denominator within one whole <i>through a variety of increasingly complex problems to improve fluency.</i>	To add and subtract fractions with the same denominator <i>to become fluent through a variety of increasingly complex problems beyond one whole.</i>		

Fractions, Decimals and Percentages	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i> Teacher Assessment Framework		KS2 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i>			
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4		
Multiplying and Dividing Fractions							
Equivalence			To write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence $\frac{2}{4}$ and $\frac{1}{2}$ .	To recognise and show, using diagrams, equivalent fractions with small denominators.	To use factors and multiples to recognise equivalent fractions and simplify where appropriate.  To recognise and show, using diagrams, families of common equivalent fractions.  To recognise and write decimal equivalents of any number of tenths or hundredths.  To recognise and write decimal equivalents to $\frac{1}{4}$ , $\frac{1}{2}$ , $\frac{3}{4}$ .		



Fractions, Decimals and Percentages	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i> Teacher Assessment Framework		KS2 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i>			
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4		
Comparing and Ordering Decimals					<p>To learn decimal notation and the language associated with it, including in the context of measurements.</p> <p>To represent numbers with one or two decimal places in several ways, such as on number lines.</p> <p>To compare numbers, amounts and quantities with the same number of decimal places up to two decimal places.</p>		
Rounding Decimals					To round decimals with one decimal place to the nearest whole number.		

Fractions, Decimals and Percentages	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i> Teacher Assessment Framework		KS2 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i>			
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4		
Adding and Subtracting Decimals							
Multiplying and Dividing Decimals					To find the effect of dividing a one or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths.		

Fractions, Decimals and Percentages	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i> Teacher Assessment Framework		KS2 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i>			
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4		
Multiplying and Dividing Decimals							
Solve Problems				To solve problems that involve all of the above.	To solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number. To solve simple measure and money problems involving fractions and decimals to two decimal places.		

Algebra	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i> Teacher Assessment Framework		KS2 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i>			
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4		
Algebra							

Measurement	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i> Teacher Assessment Framework		KS2 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i>				
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4			
Describe, Measure, Compare and Solve (All Strands)	<p>To order two or three items by length or height.</p> <p>To order two items by weight or capacity.</p> <p>To use everyday languages to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and solve problems.</p>	<p>To compare, describe and solve practical problems for: lengths and heights, mass/weight, capacity and volume, time.</p> <p>To measure and begin to record the following: lengths and heights, mass/weight, capacity and volume, time.</p> <p><i>To move from using and comparing different types of quantities and measures using non-standard units, including discrete (for example, counting) and continuous (for example, liquid) measurement, to using manageable common standard units using measuring tools, such as a ruler, weighing scales and containers.</i></p>	<p>To choose and use appropriate standard units <i>with increasing accuracy using their knowledge of the number system</i> to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels.</p> <p><i>To use the appropriate language and record using standard abbreviations.</i></p> <p>To compare and order lengths, mass, volume/capacity and record the results using &gt;, &lt; and =.</p> <p><i>To compare measures including simple multiples such as 'half as high'; 'twice as wide'.</i></p>	<p>To measure <i>using the appropriate tools and units</i>, compare (<i>including simple scaling by integers</i>) add and subtract <i>using mixed units</i>: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).</p>	<p>To estimate, compare and calculate different measures, including money in pounds and pence.</p>			

Measurement	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i> Teacher Assessment Framework		KS2 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i>			
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4		
Converting Units of Measure (All Strands)					<p><i>To use multiplication to convert from larger to smaller units.</i></p> <p><i>To convert between different units of measure and build on their understanding of place value and decimal notation to record metric measures, including money.</i></p>		

Measurement	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i> <b>Teacher Assessment Framework</b>		KS2 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i>				
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4			
Telling the Time	<p>To use everyday language related to time.</p> <p>To order and sequence familiar events.</p> <p>To measure short periods of time in simple ways.</p>	<p>To sequence events in chronological order using language.</p> <p>To recognise and use language relating to dates, including days of the week, weeks, months and years.</p> <p>To tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.</p>	<p>To read, tell and write the time to five minutes, including quarter past/to the hour/half hour and draw the hands on a clock face to show these times.</p> <p><i>To become fluent in telling the time on analogue clocks and recording it.</i></p> <p>To know the number of minutes in an hour and the number of hours in a day.</p> <p>To compare and sequence intervals of time.</p>	<p>To tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks.</p> <p><i>To begin to use digital 12-hour clocks and record their times in preparation for using digital 24-hour clocks in year 4.</i></p> <p>To estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours.</p> <p>To use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight.</p> <p>To know the number of seconds in a minute and the number of days in each month, year and leap year.</p> <p>To compare durations of events.</p>	<p>To read, write and convert time between analogue and digital 12- and 24-hour clocks.</p> <p>To solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.</p>			

Measurement	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i> Teacher Assessment Framework		KS2 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i>				
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4			
Money	To begin to use everyday language related to money.	To recognise and know the value of different denominations of coins and notes.	<p>To become fluent in counting and recognising coins.</p> <p>To recognise and use symbols for pounds (£) and pence (p) accurately, recording pounds and pence separately; combine amounts to make a particular value.</p> <p>To find and use different combinations of coins that equal the same amounts of money.</p> <p>To solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.</p>	<p>To become fluent in recognising the value of coins.</p> <p>To add and subtract manageable amounts of money, including mixed units, to give change, using both £ and p in practical contexts.</p>				



Measurement	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i> Teacher Assessment Framework		KS2 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i>			
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4		
Perimeter, Area and Volume				To measure the perimeter of simple 2D shapes.	To measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.  <i>To know perimeter can be expressed algebraically as <math>2(a + b)</math> where <math>a</math> and <math>b</math> are the dimensions in the same unit.</i>  To find the area of rectilinear shapes by counting squares.  <i>To relate area to arrays and multiplication.</i>		

Properties of Shapes	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance Non-Statutory Curriculum Guidance Teacher Assessment Framework		KS2 Statutory Curriculum Guidance Non-Statutory Curriculum Guidance				
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4			
Recognise 2D and 3D Shapes and Their Properties	<p>To show an interest in shape and space by playing with shapes or making arrangements with objects.</p> <p>To show interest in shape by sustained construction activity or by talking about shapes or arrangements.</p> <p>To show interest in shapes in the environment.</p> <p>To use shapes appropriately for tasks.</p> <p>To begin to talk about shapes in everyday objects, e.g. ‘round’ and ‘tall’.</p> <p>To begin to use mathematical names for ‘solid’ 3D shapes and ‘flat’ 2D shapes, and mathematical terms to describe shapes.</p> <p>To select a particular named shapes.</p> <p>To explore characteristics of everyday objects and shapes and use mathematical language to describe them.</p>	<p>To recognise, handle and name common 2D and 3D shapes in different orientations/sizes and relate everyday objects fluently.</p> <p>To recognise that rectangles, triangles, cuboids and pyramids are not always similar to each other.</p>	<p>Pupils read and write names for shapes that are appropriate for their word reading and spelling.</p> <p>To handle, identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line.</p> <p>To handle, identify and describe the properties of 3D shapes, including the number of edges, vertices and faces.</p> <p>To identify 2D shapes on the surface of 3D shapes.</p>	<p>To describe the properties of 2D and 3D shapes using accurate language.</p> <p>To extend knowledge of the properties of shapes is extended at this stage to symmetrical and non-symmetrical polygon and polyhedron.</p> <p>To recognise 3D shapes in different orientations and describe them.</p>	<p>To identify lines of symmetry in 2D shapes presented in different orientations.</p> <p>To recognise line symmetry in a variety of diagrams, including where the line of symmetry does not dissect the original shape.</p>			

Properties of Shapes	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance Non-Statutory Curriculum Guidance Teacher Assessment Framework		KS2 Statutory Curriculum Guidance Non-Statutory Curriculum Guidance			
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4		
Compare and Classify Shapes	To show awareness of similarities of shapes in the environment.		To identify, compare and sort common 2D and 3D shapes and everyday objects on the basis of their properties and use vocabulary precisely.		To compare lengths and angles to decide if a polygon is regular or irregular.  To compare and classify geometric shapes, including different quadrilaterals and triangles, based on their properties and sizes.		
Drawing 2D Shapes and Constructing 3D Shapes			Pupils draw lines and shapes using a straight edge.	To connect decimals and rounding to drawing and measuring straight lines in centimetres, in a variety of contexts.  To identify horizontal and vertical lines and pairs of perpendicular and parallel lines.  To draw 2D shapes and make 3D shapes using modelling materials.	To draw with increasing accuracy and develop mathematical reasoning to analyse shapes and their properties and confidently describe the relationships between them.  To complete a simple symmetric figure with respect to a specific line of symmetry.		

Properties of Shapes	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i> Teacher Assessment Framework		KS2 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i>			
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4		
Angles				<p>To recognise angles as a property of shape or a description of a turn.</p> <p>To identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn</p> <p>To identify whether angles are greater than or less than a right angle.</p>	<p>To identify acute and obtuse angles and compare and order angles up to two right angles by size <i>in preparation for using a protractor.</i></p>		

Position and Direction	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i> Teacher Assessment Framework		KS2 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i>			
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4		
Position, Direction and Movement	<p>To use positional language.</p> <p>To describe their relative position such as 'behind' or 'next to'.</p>	<p>To describe position, direction and movement, including whole, half, quarter and three-quarter turns <i>in both directions and connect clockwise with the movement on a clock face.</i></p> <p>To use the language of position, direction and motion, including: <i>left and right, top, middle and bottom, on top of, in front of, above, between, around, near, close and far, up and down, forwards and backwards, inside and outside.</i></p>	<p>To use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anticlockwise).</p>		<p>To describe positions on a 2D grid as coordinates in the first quadrant.</p> <p>To draw a pair of axes in one quadrant, with equal scales and integer labels.</p> <p>To read, write and use pairs of coordinates, including using coordinate plotting ICT tools.</p> <p>To plot specified points and draw sides to complete a given polygon.</p> <p>To describe movements between positions as translations of a given unit to the left/right and up/down.</p>		
Patterns	<p>To use familiar objects and common shapes to create and recreate patterns and build models.</p> <p>To recognise, create and describe patterns.</p>		<p>To order and arrange combinations of mathematical objects and shapes, including those in different orientations, in patterns and sequences.</p>				

Statistics	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i> Teacher Assessment Framework		KS2 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i>			
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4		
Record, Present and Interpret Data	To record, using marks that they can interpret and explain.		<p>To record, interpret, collate, organise and compare information.</p> <p>To interpret and construct simple pictograms, tally charts, block diagrams and simple tables (e.g. many-to-one correspondence in pictograms with simple ratios 2, 5, 10 scales).</p> <p>To ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.</p> <p>To ask and answer questions about totalling and comparing categorical data.</p>	<p>To interpret and present data using bar charts, pictograms and tables <i>and use simple scales with increasing accuracy.</i></p>	<p><i>To understand and use a greater range of scales in data representations.</i></p> <p>To interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.</p>		

Statistics	EYFS (30 - 50mths to ELGs)	KS1 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i> Teacher Assessment Framework		KS2 Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i>			
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4		
Solve Problems				To solve one-step and two-step questions using information presented in scaled bar charts and pictograms and tables.	To solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.		