

Place Value

	EY	Year 1	Year 2	Year 3
Place Value: Counting	Children at the expected level of development will: <ul style="list-style-type: none"> Have a deep understanding of number to 10, including the composition of each number; Subitise (recognise quantities without counting) up to 5; Verbally count beyond 20, recognising the pattern of the counting system; Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity; - Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally. 	<ul style="list-style-type: none"> To count to and across 100, forwards and backwards, beginning with 0 or 1, from any given number. To count numbers to 100 in numerals; count in multiples of 2s, 5s and 10s. . 	<ul style="list-style-type: none"> To count in steps of 2, 3 and 5, from 0 and in 10s from any number forwards and backwards. 	<ul style="list-style-type: none"> To count from 0 in multiples of 4, 8, 50 and 100 and to find 10 or 100 more or less than a given number.
Place Value: Represent		<ul style="list-style-type: none"> To identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least To read and write numbers from 1-20 in numerals and words. 	<ul style="list-style-type: none"> To read and write numbers to at least 100 in numerals and in words. To identify, represent and estimate numbers using different representations, including the number line. 	<ul style="list-style-type: none"> To identify, represent and estimate numbers using different representations. To read and write numbers up to 1000 in numerals and words.
Place Value: Use PV and Compare		<ul style="list-style-type: none"> Given a number identify 1 more and 1 less. 	<ul style="list-style-type: none"> Recognise the place value of each digit in a two digit number (tens and ones). Compare and order numbers from 0 up to 100; use the $<$, $>$ and $=$ signs. 	<ul style="list-style-type: none"> To recognise the place value of each digit in a three digit number (hundreds, tens, ones). To compare and order numbers up to 1000.
Place Value: Problem Solving and Rounding			<ul style="list-style-type: none"> Use place value and number facts to solve problems. 	<ul style="list-style-type: none"> To solve number problems and practical problems involving these ideas.

Addition and Subtraction				
	EY	Year 1	Year 2	Year 3
Addition and Subtraction: Recall, Represent, Use	<ul style="list-style-type: none"> Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts. 	<ul style="list-style-type: none"> Read, write and interpret mathematical statements involving addition (+) subtraction (-) and equals (=) signs. To represent and use number bonds and related subtraction facts within 20. 	<ul style="list-style-type: none"> To recall and use addition and subtraction facts to 20 fluently and derive and use related facts up to 100. Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another number cannot. To recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. 	<ul style="list-style-type: none"> To estimate the answer to a calculation and use inverse operations and check answers.
Addition and Subtraction: Calculations		<ul style="list-style-type: none"> To add and subtract one-digit and two-digit numbers to 20, including 0 	<ul style="list-style-type: none"> add and subtract numbers using concrete objects, pictorial representations, and mentally, including: <ul style="list-style-type: none"> ➢ a two-digit number and 1s ➢ a two-digit number and 10s ➢ 2 two-digit numbers ➢ adding 3 one-digit numbers 	<ul style="list-style-type: none"> add and subtract numbers mentally, including: <ul style="list-style-type: none"> ➢ a three-digit number and 1s ➢ a three-digit number and 10s ➢ a three-digit number and 100s add and subtract numbers with up to 3 digits, using formal written methods of columnar addition and subtraction
Addition and Subtraction: Solving Problems		<ul style="list-style-type: none"> solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = ? - 9$ 	<ul style="list-style-type: none"> solve problems with addition and subtraction: <ul style="list-style-type: none"> ➢ using concrete objects and pictorial representations, including those involving numbers, quantities and measures ➢ applying their increasing knowledge of mental and written methods 	<ul style="list-style-type: none"> solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction

Multiplication and Division				
	EY	Year 1	Year 2	Year 3
Multiplication and Division: Recall, Represent, Use			<ul style="list-style-type: none"> recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers. show that multiplication of 2 numbers can be done in any order (commutative) and division of 1 number by another cannot 	<ul style="list-style-type: none"> recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
Multiplication and Division: Calculations			<ul style="list-style-type: none"> calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals (=) signs 	<ul style="list-style-type: none"> 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 mental and progressing to formal written methods
Multiplication and Division: Solving Problems		<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts 	<ul style="list-style-type: none"> solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects

Fractions

	EY	Year 1	Year 2	Year 3
Fractions: Recognise and Write		<ul style="list-style-type: none"> recognise, find and name a half as 1 of 2 equal parts of an object, shape or quantity recognise, find and name a quarter as 1 of 4 equal parts of an object, shape or quantity 	<ul style="list-style-type: none"> recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity 	<ul style="list-style-type: none"> 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 10 recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators
Fractions: Compare			<ul style="list-style-type: none"> recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$ 	<ul style="list-style-type: none"> recognise and show, using diagrams, equivalent fractions with small denominators compare and order unit fractions, and fractions with the same denominators
Fractions: Calculations			<ul style="list-style-type: none"> write simple fractions, for example $\frac{1}{2}$ of 6 = 3 	<ul style="list-style-type: none"> add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$]
Fractions: Solve Problems				<ul style="list-style-type: none"> solve problems that involve all of the above.

Measurement

	EY	Year 1	Year 2	Year 3
Measurement: Using Measures		<ul style="list-style-type: none"> compare, describe and solve practical problems for: <ul style="list-style-type: none"> lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] mass/weight [for example, heavy/light, heavier than, lighter than] capacity and volume [for example, full/empty, more than, less than, half, half full, quarter] time [for example, quicker, slower, earlier, later] measure and begin to record the following: <ul style="list-style-type: none"> lengths and heights mass/weight capacity and volume time (hours, minutes, seconds) 	<ul style="list-style-type: none"> choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature ($^{\circ}\text{C}$); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels compare and order lengths, mass, volume/capacity and record the results using $<$ $>$ and $=$ 	<ul style="list-style-type: none"> measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)
Measurement: Money		<ul style="list-style-type: none"> recognise and know the value of different denominations of coins and notes 	<ul style="list-style-type: none"> recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value find different combinations of coins that equal the same amounts of money solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change 	<ul style="list-style-type: none"> add and subtract amounts of money to give change, using both £ and p in practical contexts

Measurement: Time				
	EY	Year 1	Year 2	Year 3
Measurement: Time		<ul style="list-style-type: none"> sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening] recognise and use language relating to dates, including days of the week, weeks, months and years tell the time to the hour and half past the hour and draw the hands on a clock face to show these times 	<ul style="list-style-type: none"> compare and sequence intervals of time tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times know the number of minutes in an hour and the number of hours in a day 	<ul style="list-style-type: none"> tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight know the number of seconds in a minute and the number of days in each month, year and leap year compare durations of events [for example, to calculate the time taken by particular events or tasks]

Geometry				
	EY	Year 1	Year 2	Year 3
Geometry: 2-D and 3-D Shapes		<ul style="list-style-type: none"> • recognise and name common 2-D and 3-D shapes, including: • 2-D shapes [for example, rectangles (including squares), circles and triangles] • 3-D shapes [for example, cuboids (including cubes), pyramids and spheres] 	<ul style="list-style-type: none"> • identify and describe the properties of 2-D shapes, including the number of sides, and line symmetry in a vertical line • identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces • identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid] • compare and sort common 2-D and 3-D shapes and everyday objects 	<ul style="list-style-type: none"> • draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them
Geometry: Position and Direction		<ul style="list-style-type: none"> • describe position, direction and movement, including whole, half, quarter and three-quarter turns 	<ul style="list-style-type: none"> • order and arrange combinations of mathematical objects in patterns and sequences • 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 anti-clockwise) 	

Statistics				
	EY	Year 1	Year 2	Year 3
Statistics: Present and Interpret		<ul style="list-style-type: none"> recognise and name common 2-D and 3-D shapes, including: 2-D shapes [for example, rectangles (including squares), circles and triangles] 3-D shapes [for example, cuboids (including cubes), pyramids and spheres] 	<ul style="list-style-type: none"> interpret and construct simple pictograms, tally charts, block diagrams and tables 	<ul style="list-style-type: none"> interpret and present data using bar charts, pictograms and tables
Statistics: Solve Problems		<ul style="list-style-type: none"> describe position, direction and movement, including whole, half, quarter and three-quarter turns 	<ul style="list-style-type: none"> ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity ask-and-answer questions about totalling and comparing categorical data 	<ul style="list-style-type: none"> solve one-step and two-step questions [for example 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables