	Foundation Stage	Year 1 Objectives	Year 2 Objectives
Number – Number and place value	Recite numbers past 5. • Say one number name for each item in order: 1, 2, 3, 4, 5. • Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle'). • Fast recognition of up to 3 objects, without having to count them individually ('subitising'). • Show 'finger numbers' up to 5. • Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. • Experiment with their own symbols and marks as well as numerals. Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. • Experiment with their own symbols and marks as well as numerals. Compare quantities using language: 'more than', 'fewer than'. Solve real world mathematical problems with numbers up to 5. Count objects, actions and sounds. • Count beyond ten. Subitise. • Link the number symbol (numeral) with its cardinal number value. • Link the number symbol (numeral) with its cardinal number value. Compare numbers. Understand the 'one more than/one less than' relationship between consecutive numbers. • Explore the composition of numbers to 10	• count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number • count, read and write numbers to 100 in numerals • given a number, identify one more and one less • 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 • read and write numbers from 1 to 20 in numerals and words • count in multiples of twos, fives and tens • practicing ordering [first, second, third] * • recognise place value in numbers beyond 20 *	• recognise the place value of each digit in a two-digit number (tens, ones) • identify, represent and estimate numbers using different representations, including the number line • compare and order numbers from 0 up to 100; use <, > and = signs • read and write numbers to at least 100 in numerals and in words • use place value and number facts to solve problems • count in steps of 3 from 0, forward and backward • count in steps of 2 and 5 from 0, and in tens from any number, forward and backward

	Verbally count beyond 20, recognising the pattern of the counting system. • Subitise (recognising quantities without counting) up to 5. Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity. Have a deep understanding of numbers to 10, including the composition of each number.		
Number – Addition and subtraction	Automatically recall number bonds for numbers 0-10. Subitise. • Link the number symbol (numeral) with its cardinal number value. 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. Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed evenly.	• read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs • represent and use number bonds and related subtraction facts within 20 • solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = □ – 9 • add and subtract one-digit and two-digit numbers to 20, including zero • realise the effect of adding and subtracting zero in order to establish addition and subtraction as related operations *	• 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 methods • 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 cannot • recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems • add and subtract numbers using concrete objects, pictorial representations, and mentally, including: - a two-digit number and tens - adding three one-digit numbers • record addition and subtraction in columns to

			support place value and prepare for formal written methods with larger numbers *
Number – Multiplication and division		• 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 • understand multiplication and division through grouping and sharing small quantities * • make connections between arrays, number patterns and counting in twos, fives and tens * • double numbers and quantities *	• calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs • show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot • solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts • recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
Fractions		• recognise, find and name a half as one of two equal parts of an object, shape or quantity • recognise, find and name a quarter as one of four equal parts of an object, shape or quantity • recognise and combine quarters as parts of a whole * •find simple fractions of objects, numbers and quantities*	• recognise, find, name and write fractions 1/3 , 1/4 , 2/4 and 3/4 of a length, shape, set of objects or quantity • write simple fractions for example, 1/2 2 of 6 = 3 and recognise the equivalence of 2/4 and 1/2
Measurement	Make comparisons between objects relating to size, length, weight and capacity. Begin to describe a sequence of events, real or fictional, using words, such as 'first', 'then… Compare length, weight and capacity.	•compare, describe and solve practical problems for lengths and heights [for example, long/short, longer/ shorter, tall/short, double/half] • measure and begin to record lengths and heights • recognise and know the value of different denominations of coins and notes	• 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 • 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

		• compare, describe and solve practical problems for mass or weight [for example, heavy/light, heavier than, lighter than)] • measure and begin to record mass/weight • 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 • compare, describe and solve practical problems for mass or weight capacity/volume [for example, full/empty, more than, less than, quarter] • measure and begin to record capacity and volume compare, describe and solve practical problems for time [for example, quicker, slower, earlier, later] • measure and begin to record time (hours, minutes, seconds) • tell the time to the hour and half past the hour and draw the hands on a clock face to show these times	• solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change • 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 • choose and use appropriate standard units 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 • compare and order lengths, mass, volume/capacity and record the results using >, < and =
Geometry – Properties of shapes	Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners', 'straight', 'flat', 'round'. • Select shapes appropriately: flat surfaces for a building, a triangular pattern for a roof, etc. • Combine shapes to make new ones – an arch, a bigger triangle, etc. Understand position through words alone – for example, "The bag is under the table," – with no pointing. • Describe a familiar route. • Discuss routes and locations, using words like 'in front of' and 'behind'.	• recognise and name common 2-D shapes, including: – 2-D shapes [for example, rectangles (including squares), circles and triangles] • describe position, directions and movements, including half, quarter and three-quarter turns – 3-D shapes [for example, cuboids (including cubes), pyramids and spheres]	• identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line • draw lines and shapes using a straight edge * • 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 • identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces

	Talk about and identify the patterns around them. For example, stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs', etc. • Extend and create ABAB patterns – stick, leaf, stick, leaf. • Notice and correct an error in a repeating pattern. Select, rotate and manipulate shapes in order to develop spatial reasoning skills. Compose and decompose shapes so that children can recognise a shape can have other shapes within it, just as numbers can. Draw information from a simple map. • Continue, copy and create repeating patterns.		• 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 • 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)
Statistics	Experiment with their own symbols and marks, as well as numerals.		• 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