



West Bridgford Infant School – Maths Sequence of Learning



	Reception	Year 1	Year 2	Year 3
Number and Place Value	<p>Development Matters Count objects, actions and sounds, including beyond ten.</p> <ul style="list-style-type: none"> To count up to three or four objects by saying one number name for each item. (1-1 correspondence) To count actions or objects which cannot be moved. To count objects to 10 and begin to count beyond 10. To count an irregular arrangement of up to ten objects. <p>Subitise</p> <ul style="list-style-type: none"> To recognise small quantities in familiar patterns (for example, dice) and random arrangements. <p>Link the number symbol with its cardinal number value</p> <ul style="list-style-type: none"> To recognise some numerals of personal significance. To recognise numerals 1 to 5. To select the correct numeral to represent 1-5, then 1-10 objects. 	<ul style="list-style-type: none"> To count to and across 100, forward and backwards, beginning with 0 or 1 from any number. To count, read and write numbers to 100 in numerals. To count in multiples of 2, 5 and 10. To say what is one more or one less than any number. To read and write numbers from 1 to 20 in numerals and words. 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 	<ul style="list-style-type: none"> To count in steps of 2, 3 and 5 from 0, and in tens from any number, forwards and backwards. To read and write numbers to at least 100 in numerals and in words. To compare and order numbers from 0 up to 100; using < > = signs. To recognise the place value of each digit in a 2-digit number. To identify, represent and estimate numbers using different representations, including the number line. To use place value and number facts to solve problems. 	<ul style="list-style-type: none"> To count from 0 in multiples of 4, 8, 50 and 100. To compare and order numbers up to 1,000. To read and write numbers to 1,000 in numerals and words. To find 10 or 100 more or less than a given number. To recognise the place value of each digit in a 3-digit number. To identify, represent and estimate numbers using different representations. To solve number problems and practical problems using above.
	<p>Early Learning Goal</p> <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. 			

<h2 style="text-align: center;">Addition and Subtraction</h2>	<p>Development Matters Comparing Numbers</p> <ul style="list-style-type: none"> To use the language or 'more than', 'less than', 'fewer', 'the same as', 'equal to'. <p>Understanding the 'one more than/one less than' relationship between consecutive numbers.</p> <ul style="list-style-type: none"> To say the number one more than a given number. To find one more or one less from a group of up to five objects, then ten. <p>Explore the composition of numbers to ten.</p> <ul style="list-style-type: none"> To understand the composition of 2, 3, 4 and 5. To understand the composition of 6, 7, 8, 9, 10. To find the total number of items in two groups by counting all of them. <p>Automatically recall number bonds for numbers 0-10</p>	<ul style="list-style-type: none"> To represent and use number bonds and related subtraction facts to 20. To add and subtract 1-digit and 2-digit numbers to 20, including zero. To read, write and interpret mathematical statements involving addition, subtraction and equals signs. To solve one-step problems that involve addition and subtraction, using objects and pictorial representations. To solve simple missing number problems. (eg: $7 = _ - 9$) 	<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. To add and subtract using concrete objects, pictorial representations and mentally, including: <ul style="list-style-type: none"> A 2-digit number and ones A 2-digit number and tens Two 2-digit numbers Adding three 1-digit numbers To recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems. To solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures. To solve problems with addition and subtraction applying my increasing knowledge of mental and written methods. To show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot. 	<ul style="list-style-type: none"> To add and subtract mentally, including: <ul style="list-style-type: none"> A 3-digit number and ones A 3-digit number and tens A 3-digit number and hundreds To add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction. To estimate the answer to a calculation and use inverse operation to check answers. To solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.
	<p>Early Learning Goal</p> <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. 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 solve one-step problems involving multiplication and division, by using concrete objects, pictorial representations and arrays. 	<ul style="list-style-type: none"> To recall and use multiplication and division facts for the 2, 5 and 10 times tables, including recognising odd and even numbers. To calculate mathematical statements for multiplication and division within the multiplication tables and write them using 	<ul style="list-style-type: none"> To recall and use multiplication and division facts for the 3, 4 and 8x tables. To write and calculate mathematical statements for multiplication and division using the multiplication tables, including for 2-digit numbers, using mental and progressing to formal written methods.
<h2 style="text-align: center;">Multiplication and Division</h2>	<p>Development Matters No assessment criteria.</p>	<ul style="list-style-type: none"> To solve one-step problems involving multiplication and division, by using concrete objects, pictorial representations and arrays. 	<ul style="list-style-type: none"> To recall and use multiplication and division facts for the 2, 5 and 10 times tables, including recognising odd and even numbers. To calculate mathematical statements for multiplication and division within the multiplication tables and write them using 	<ul style="list-style-type: none"> To recall and use multiplication and division facts for the 3, 4 and 8x tables. To write and calculate mathematical statements for multiplication and division using the multiplication tables, including for 2-digit numbers, using mental and progressing to formal written methods.

	Early Learning Goal <ul style="list-style-type: none"> Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally. 		<p>the multiplication, division and equals signs.</p> <ul style="list-style-type: none"> To solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in context. To show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. 	<ul style="list-style-type: none"> To solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which n objects are connected to m objects.
Fractions	Development Matters No assessment criteria.	<ul style="list-style-type: none"> To recognise, find and name a half of an object, shape or quantity. To recognise, find and name a quarter of an object, shape or quantity. 	<ul style="list-style-type: none"> To recognise, find, name and write fractions $1/3$, $1/4$, $2/4$ and $3/4$ of a length, shape, set of objects or quantity. To write simple fractions, eg: $1/2$ of $6 = 3$ To recognise the equivalence of $2/4$ and $1/2$. 	<ul style="list-style-type: none"> To count up and down in tenths. To recognise that tenths arise from dividing an object into 10 equal parts and in dividing 1-digit numbers or quantities by 10. To recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators. To compare and order unit fractions and fractions with the same denominators. To add and subtract fractions with the same denominator within one whole. To solve problems involving the above
	Early Learning Goal <ul style="list-style-type: none"> Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally. 			
Measurement – Money	Development Matters No assessment criteria.	<ul style="list-style-type: none"> To recognise and know the value of different denominations of coins and notes. 	<ul style="list-style-type: none"> To recognise and use symbols for £ and p and combine amounts to make a particular value. To find different combinations of coins that equal the same amount of money. To solve simple problems in a practical context involving addition and subtraction of money of the same units, including giving change. 	<ul style="list-style-type: none"> To add and subtract amounts of money to give change, using both £ and p in a practical context.
	Early Learning Goal No assessment criteria.			
Measurement – Length and Height	Development Matters Compare length, weight and capacity	<ul style="list-style-type: none"> To compare, describe and solve practical problems for lengths and heights. <ul style="list-style-type: none"> Eg: Long/short, longer/shorter, tall/short, double/half To measure and begin to record length and heights. 	<ul style="list-style-type: none"> To compare and order lengths and record the results using $>$ $<$ and $=$. To choose and use standard units to estimate and measure length/height in any direction (m/cm) using rulers, metre sticks and tape measures. 	<ul style="list-style-type: none"> To compare, measure, add and subtract length. (m/cm/mm) To measure the perimeter of simple 2D shapes.
	Early Learning Goal No assessment criteria.			
Measurement – Mass	Development Matters Compare length, weight and capacity	<ul style="list-style-type: none"> To compare, describe and solve practical problems for mass/weight. <ul style="list-style-type: none"> Eg: heavy/light, heavier than, lighter than To measure and begin to record mass/weight. 	<ul style="list-style-type: none"> To compare and order mass and record the results using $>$ $<$ and $=$. To choose and use standard units to estimate and measure mass (kg/g) using scales. 	<ul style="list-style-type: none"> To compare, measure, add and subtract mass. (kg/g)
	Early Learning Goal No assessment criteria.			
Measurement – Capacity and Volume	Development Matters Compare length, weight and capacity	<ul style="list-style-type: none"> To compare, describe and solve practical problems for capacity and volume. <ul style="list-style-type: none"> Eg: full/empty, more than, less than, half, half full, quarter To measure and begin to record capacity and volume. 	<ul style="list-style-type: none"> To compare and order volume/capacity and record the results using $>$ $<$ and $=$. To choose and use standard units to estimate and measure capacity to the nearest appropriate unit (l/ml) using measuring vessels. 	<ul style="list-style-type: none"> To compare, measure, add and subtract volume/capacity. (l/ml)
	Early Learning Goal No assessment criteria.			

Measurement - Temperature	Development Matters No assessment criteria. Early Learning Goal No assessment criteria.	No assessment criteria (not covered in the National Curriculum Programmes of Study for Year 1)	<ul style="list-style-type: none"> To choose and use standard units to estimate and measure temperature (°C) using thermometers. 	No assessment criteria (not covered in the National Curriculum Programmes of Study for Year 3)
Measurement - Time	Development Matters No assessment criteria. Early Learning Goal No assessment criteria.	<ul style="list-style-type: none"> To compare, describe and solve practical problems for time. <ul style="list-style-type: none"> Eg: quicker, slower, earlier, later To measure and begin to record time <ul style="list-style-type: none"> Eg: hours, minutes and seconds To tell the time to the hour. To tell the time to half past the hour. To draw hands on a clock face to show these times. To sequence events in chronological order using language. To recognise and use language relating to dates, including days, weeks, months and years. 	<ul style="list-style-type: none"> To tell and write the time to five minutes, including quarter to/past and draw the hands on a clock face to show these times. To compare and sequence intervals of time. To know the number of minutes in an hour. To know the number of hours in a day. 	<ul style="list-style-type: none"> To tell and write the time from an analogue clock (12 hour clock). To tell and write the time from an analogue clock (24 hour clock). To tell and write the time from an analogue clock (Roman numerals). To estimate and read time with increasing accuracy to the nearest minute. To record and compare time in terms of seconds, minutes and hours. To use the following vocabulary: o'clock, am, pm, morning, afternoon, noon & midnight. To know the number of seconds in a minute. To know the number of days in each month, year and leap year. To compare the duration of events.
Geometry - Shape	Development Matters Select, rotate and manipulate shapes in order to develop spatial reasoning skills. Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can. <ul style="list-style-type: none"> To begin to use mathematical names for 'solid' 3D shapes and 'flat' 2D shapes and mathematical terms to describe shapes. To select a particular named shape. To uses familiar objects and common shapes to create and recreate patterns and build models. Continue, copy and create repeating patterns. Early Learning Goal No assessment criteria.	<ul style="list-style-type: none"> To recognise and name common 2D shapes (rectangles, including squares, circles and triangles). To recognise and name common 3D shapes (cuboids, including cubes, pyramids and spheres). 	<ul style="list-style-type: none"> To compare and sort common 2D and 3D shapes and everyday objects. To identify and describe the properties of 2D shapes, including the number of sides and line of symmetry in a vertical line. To identify and describe the properties of 3D shapes including the number of edges, vertices and faces. To identify 2D shapes on the surface of 3D shapes. 	<ul style="list-style-type: none"> To identify horizontal, vertical lines and pairs of perpendicular and parallel lines. To draw 2D shapes. To make 3D shapes using modelling materials. To recognise 3D shapes in different orientations and describe them. To recognise that angles are a property of shape or a description of a turn. To can identify right angles. ◊ I recognise that two right angles make a half-turn & three make a three quarter turn. To can identify whether angles are greater than or less than a right angle.
	Development Matters No assessment criteria.	<ul style="list-style-type: none"> To describe position, directions and movement, including half, quarter and three-quarter turns. 	<ul style="list-style-type: none"> To order and arrange combinations of mathematical objects in patterns and sequences. 	No assessment criteria (not covered in the National Curriculum Programmes of Study for Year 3)

Geometry – Position and Direction	Early Learning Goal No assessment criteria.		<ul style="list-style-type: none"> 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 anti-clockwise)). 	
Statistics	Development Matters No assessment criteria.	No assessment criteria (not covered in the National Curriculum Programmes of Study for Year 1)	<ul style="list-style-type: none"> To interpret and construct simple pictograms, tally charts, block diagrams and simple tables. To ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. To ask and answer questions about totalling and comparing categorical data. 	<ul style="list-style-type: none"> To interpret and present data using bar charts, pictograms and tables. To solve one-step and two-step questions using information presented in scaled bar charts, pictograms and tables.
	Early Learning Goal No assessment criteria.			