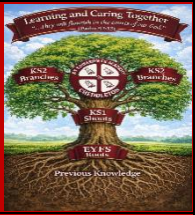


MATHS CURRICULUM LEARNING OVERVIEW
YEAR A and YEAR B



UNIT	NURSERY	RECEPTION	YEAR 1	YEAR 2	YEAR 3	YEAR 4
1	Number Begin to describe a sequence of events, real or fictional, using words such as ‘first’, ‘then...’ Develop fast recognition of up to 3 objects, without having to count them individually ‘subitising’ Say one number for each item in order: <u>1,2,3,4,5</u> 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 Say one number for each item in order: <u>1,2,3,4,5</u> 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 Know that the last number reached when counting a small set of objects tells you how many there are in total Compare quantities using language: ‘more than’, ‘fewer than’ Recite numbers past 5	Baseline	Place value within 10 Count to and across 100; count, read and write numbers; identify 1 more/1 less; represent and compare numbers; read/write 1–20.	Place value Count in steps of 2, 3 and 5 from 0 and in tens; recognise place value of each digit in a two-digit number; identify, represent, estimate, compare and order numbers; read and write numbers to at least 100; use place value and number facts.	Place Value Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more/less; recognise place value in three-digit numbers; compare, order, represent, estimate, read and write numbers to 1000; solve problems.	Place Value Count in multiples of 6, 7, 9, 25 and 1000; find 1000 more/less; count backwards through zero; recognise place value in four-digit numbers; order, compare, round and solve problems; read Roman numerals to 100.

2	Shape Select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc Combine shapes to make new ones – an arch, a bigger triangle etc 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’	Number Count objects, actions and sounds Subitise Link the number symbol (numeral) with its cardinal number value Count beyond ten Compare numbers Understand the ‘one more than’ relationship between consecutive numbers Early Learning Goals Have a deep understanding of number to 10 Subitise (recognise quantities without counting) up to 5	Addition and subtraction within 10 Read, write and interpret +, – and =; represent and use number bonds; add and subtract one-digit and two-digit numbers to 20; solve one-step problems.	Addition and subtraction Solve problems with addition and subtraction; recall and use facts to 20 and derive related facts to 100; add and subtract using concrete objects.	Addition and Subtraction Add and subtract mentally including three-digit numbers and ones/tens/hundreds; use formal written methods up to three digits; estimate and use inverse; solve problems including missing numbers.	Addition and Subtraction Add and subtract numbers with up to 4 digits using formal written methods; estimate and use inverse; solve two-step problems.
	Measurement: Length, height, weight and capacity Make comparisons between objects relating to size, length, weight and capacity	Number: Addition and Subtraction Understand the ‘one less than’ relationship between consecutive numbers Explore the composition of numbers to 10 Automatically recall number bonds for numbers 0–5 and some to 10 Early Learning Goals Have a deep understanding of number to 10, including the composition of each number 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	Geometry Recognise and name common 2-D and 3-D shapes.	Geometry Identify and describe properties of 2-D and 3-D shapes; identify 2-D shapes on surfaces of 3-D shapes; compare and sort shapes; order and arrange combinations in patterns.	Multiplication and Division (A) Recall and use 3, 4 and 8 multiplication/division facts; write and calculate multiplication/division statements; solve problems including missing numbers.	Area Find the area of rectilinear shapes by counting squares.

		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.				
4	Pattern Talk about and identifies 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	Measurement: Length, weight, mass and capacity Compare length, weight and capacity	Place Value within 20 Count, read, write, identify, represent and compare numbers; identify 1 more and 1 less.	Money Recognise and use symbols for pounds and pence; combine amounts; find combinations of coins; solve simple problems including giving change.	Multiplication and Division (B) Write and calculate multiplication/division statements including two-digit by one-digit using mental and formal methods; solve problems.	Multiplication and Division (A) Recall multiplication/division facts up to 12×12; use place value and known/derived facts; recognise factor pairs and commutativity.
5	Position Describe a familiar route Discuss routes and locations, using words like ‘in front of’ and ‘behind’ Understand position through words alone – for example, “The bag is under the table,” – with no pointing	Shape Select, rotate and manipulate shapes 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. Copy and create repeating patterns.	Addition and subtraction within 20 Use number bonds and related subtraction facts within 20; add and subtract; solve one-step problems.	Multiplication and Division Recall and use multiplication and division facts for 2, 5 and 10 times tables; calculate statements; show multiplication is commutative; solve grouping, sharing and array problems.	Length and Perimeter Measure, compare, add and subtract lengths; measure perimeter of simple 2-D shapes.	Multiplication and division (B) Use factor pairs; multiply two- and three-digit numbers by one digit using formal layout; solve correspondence and scaling problems.

6	Number Solve real world mathematical problems with numbers up to 5 (in provision) Develop fast recognition of up to 5 objects, without having to count them individually 'subitising' Experiment with their own symbols and marks as well as numerals.		Place Value within 50 Count, read, write and represent numbers; count in multiples; identify 1 more/less; compare.	Length and height Choose and use appropriate standard units to estimate and measure length/height; compare and order lengths and record results using >, < and =.	Fractions (A) Count in tenths; recognise tenths; find, recognise and use fractions of sets and numbers; compare and order unit fractions and fractions with same denominators.	Length and perimeter Convert between units; measure and calculate perimeter of rectilinear figures in centimetres and metres.
	7		Length and height Compare, describe and solve practical problems for lengths/heights; measure and begin to record.	Measures- Mass, capacity and temperature Choose and use standard units to estimate and measure mass, capacity and temperature; compare and order measurements.	Mass and Capacity Measure, compare, add and subtract mass and capacity/volume using mixed units.	Fractions Recognise and show families of equivalent fractions; count in hundredths; solve increasingly difficult fractions of quantities; add/subtract fractions with same denominator; recognise decimal equivalents of tenths/hundredths and 1/4, 1/2, 3/4; divide by 10 and 100.
	8		Mass and Volume Compare, describe and solve practical problems for mass/weight and capacity/volume; measure and begin to record.	Fractions Recognise, find, name and write 1/3, 1/4, 2/4 and 3/4 of lengths, shapes, sets and quantities; write simple fraction facts and recognise equivalence of 2/4 and 1/2.	Fractions (B) Recognise and show equivalent fractions; add/subtract fractions with same denominator within one whole; solve fraction problems.	Decimals (A) Recognise and write decimal equivalents of tenths and hundredths; divide one- and two-digit numbers by 10 and 100; compare and order decimals.
	9		Multiplication and division Count in 2s, 5s and 10s; solve one-step multiplication/division problems using objects, arrays and grouping/sharing.	Time Compare and sequence intervals; tell and write time to five minutes including quarter past/to; know minutes in an hour and hours in a day.	Money Add and subtract amounts of money to give change, using £ and p in practical contexts.	Decimals (B) Compare and order decimals with same number of decimal places; round decimals with one decimal place to nearest whole; solve money/measure
	10		Fractions Recognise, find and name a half and a quarter of objects, shapes and quantities.	Statistics Interpret and construct simple pictograms, tally charts, block diagrams and tables; ask and answer comparison and total questions.	Time Tell and write time from analogue clocks including Roman numerals and 12/24-hour clocks; estimate/read time to nearest minute; compare durations; know time facts.	Money Estimate, compare and calculate different measures including money in pounds and pence.

11			Position and direction Describe position, direction and movement, including whole, half, quarter and three-quarter turns.	Position and direction Order and arrange combinations in patterns; use mathematical vocabulary to describe position, direction and movement, including rotation.	Geometry Draw 2-D shapes and make 3-D shapes; recognise 3-D shapes in orientations; recognise angles as turns/properties; identify right angles and horizontal/vertical, perpendicular and parallel lines.	Time Convert between analogue and digital 12- and 24-hour clocks; solve problems converting hours/minutes/seconds and years/months/weeks/days.
12			Place value within 100 Count to/across 100; count, read and write numbers; identify 1 more/less; represent and compare; count in 2s, 5s and 10s.		Statistics Interpret and present data using bar charts, pictograms and tables; solve one- and two-step questions.	Shape Compare and classify geometric shapes; identify acute/obtuse angles; compare/order angles; identify lines of symmetry and complete symmetric figures.
13			Money Recognise and know the value of different denominations of coins and notes.			Statistics Interpret and present discrete and continuous data using bar charts and time graphs; solve comparison, sum and difference problems.
14			Time Sequence events; use dates; tell time to the hour and half hour; compare time.			Position and direction Describe positions on a 2-D grid as coordinates in the first quadrant; describe translations; plot specified points and complete polygons.