

Maths Termly Progression (Three to Four years / Reception)

Children are taught how to use and recognise 'magical' maths skills:	
Counting <ul style="list-style-type: none"> • 1:1 correspondence • Ordinality • Cardinality 	Subitising <ul style="list-style-type: none"> • Recognition of number patterns without the need for counting • Perceptual – up to 5 • Conceptual - 5 and above
Comparing <ul style="list-style-type: none"> • Using language such as more than, less than, equal 	Composition <ul style="list-style-type: none"> • The understanding that numbers and shapes can be made from other numbers and shapes (whole/parts)

Autumn	Term 1	Number <ul style="list-style-type: none"> • Develop fast recognition of up to 3 objects, without having to count them individually ('subitising'). • Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle'). • Show 'finger numbers' up to 5. • Compare quantities using language: 'more than', 'fewer than'. • 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. 	Shape, Space and Measure <ul style="list-style-type: none"> • Make comparisons between objects relating to size, length, weight and capacity • Select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc • 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.
		Number <ul style="list-style-type: none"> • Recite numbers past 5 • Say one number for each item in order: 1,2,3,4,5 • Solve real world mathematical problems with numbers up to 5 • Compare quantities using language: 'more than', 'fewer than'. • Subitise • Count objects, actions and sounds • Link the number symbol (numeral) with its cardinal number value • Understand the 'one more than/one less than' relationship between consecutive numbers • Explore the composition of numbers to 5 	Shape, Space and Measure <ul style="list-style-type: none"> • Select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc • Discuss routes and locations, using words like 'in front of' and 'behind' • Talk about and explore 2D (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round' • Understand position through words alone – for example, "The bag is under the table," – with no pointing.
	Term 2	Number <ul style="list-style-type: none"> • Recite numbers past 5 • Say one number for each item in order: 1,2,3,4,5 • Solve real world mathematical problems with numbers up to 5 • Compare quantities using language: 'more than', 'fewer than'. • Subitise • Count objects, actions and sounds • Link the number symbol (numeral) with its cardinal number value • Understand the 'one more than/one less than' relationship between consecutive numbers • Explore the composition of numbers to 5 	Shape, Space and Measure <ul style="list-style-type: none"> • Select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc • Discuss routes and locations, using words like 'in front of' and 'behind' • Talk about and explore 2D (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round' • Understand position through words alone – for example, "The bag is under the table," – with no pointing.
		Number <ul style="list-style-type: none"> • Recite numbers past 5 • Say one number for each item in order: 1,2,3,4,5 • Solve real world mathematical problems with numbers up to 5 • Compare quantities using language: 'more than', 'fewer than'. • Subitise • Count objects, actions and sounds • Link the number symbol (numeral) with its cardinal number value • Understand the 'one more than/one less than' relationship between consecutive numbers • Explore the composition of numbers to 5 	Shape, Space and Measure <ul style="list-style-type: none"> • Select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc • Discuss routes and locations, using words like 'in front of' and 'behind' • Talk about and explore 2D (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round' • Understand position through words alone – for example, "The bag is under the table," – with no pointing.

Spring	Term 3	Number	Shape, Space and Measure
		<ul style="list-style-type: none"> • Say one number for each item in order: 1,2,3,4,5 • Solve real world mathematical problems with numbers up to 5 • Link the number symbol (numeral) with its cardinal number value • Count objects, actions and sounds • Subitise • Understand the 'one more than/one less than' relationship between consecutive numbers • Compare numbers • Explore the composition of numbers to 10. • Automatically recall number bonds for numbers 0-5 	<ul style="list-style-type: none"> • Describe a familiar route. • Discuss routes and locations, using words like 'in front of' and 'behind'. • 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
	Term 4	Number	Shape, Space and Measure
		<ul style="list-style-type: none"> • Say one number for each item in order: 1,2,3,4,5 • Count objects, actions and sounds • Subitise • Link the number symbol (numeral) with its cardinal number value • Understand the 'one more than/one less than' relationship between consecutive numbers • Explore the composition of numbers to 10. • Compare numbers • Automatically recall number bonds for numbers 0-5 • Being introduced to double facts • Sorting odd and even numbers 	<ul style="list-style-type: none"> • 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 building, a triangular prism for a roof etc. • Combine shapes to make new ones – an arch, a bigger triangle etc • Extend and create ABAB patterns – stick, leaf, stick, leaf. • Notice and correct an error in a repeating pattern. • Continue, copy and create repeating patterns • 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.

Summer	Term 5	Number	Shape, Space and Measure
		<ul style="list-style-type: none"> • Experiment with their own symbols and marks as well as numerals. • Count beyond ten. • Count objects, actions and sounds. • Link the number symbol (numeral) with its cardinal number value. • Subitise • Explore the composition of numbers to 10 • Automatically recall number bonds for numbers 0-5 and some to 10. • Compare numbers. 	<ul style="list-style-type: none"> • 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.
	Term 6	Number	Shape, Space and Measure
		<ul style="list-style-type: none"> • 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/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 	<ul style="list-style-type: none"> • 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. • Continue, copy and create repeating patterns. • Compare length, weight and capacity

End of EYFS Expectations – Maths

Maths - number			
Educational Programme & ELGs	Brize Norton Primary School End of Year Expectations:	Children should be familiar with the following equipment:	Y1 Programme of Study (NC)
<p>Mathematics Developing a strong grounding in number is essential so that all children develop the necessary building blocks to excel mathematically. Children should be able to count confidently, develop a deep understanding of the numbers to 10, the relationships between them and the patterns within those numbers. By providing frequent and varied opportunities to build and apply this understanding - such as using manipulatives, including small pebbles and tens frames for organising counting - children will develop a secure base of knowledge and vocabulary from which mastery of mathematics is built. In addition, it is important that the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures. It is important that children develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, 'have a go', talk to adults and peers about what they notice and not be afraid to make mistakes.</p> <p>Mathematics ELG: Number Children at the expected level of development will:</p>	<ul style="list-style-type: none"> Count reliably to 20 and beyond, Count 20 objects by pointing to/moving each one as they count Understand the cardinal principle – that the number name assigned to the final object in the group is the total number of objects in that group Understand conservation of number – the recognition that the number stays the same if none has been added or taken away Subitise up to 5 (regular/irregular patterns) Automatically recall number bonds for numbers 0-5 and for 10, including corresponding partitioning facts. Recognise numbers to 20 Order numbers 1 – 20 Use mathematical language to describe quantities, and to make estimates and comparisons such as 'more than', 'less than' and 'equal to'. Form all digits 0-9 correctly Automatically recall double facts up to 5+5 Halve quantities by sharing items Share small quantities of items fairly Understand that quantities that can be shared into two equal groups, with no items left over, are even 	<ul style="list-style-type: none"> Numicon Part-whole model Range of counters, including double-sided Unifix/multilink Number track Rekenreks Bead strings (to 20) Counting stick British coins Fives frames Tens frames Dice frames Number card Dice Balance scales 2D shapes 3D shapes A ruler Threading beads – patterns Peg boards - patterns Compare Bears Pattern Frogs Measuring worms Non-standard units, to include wooden blocks + unifix 	<p>Number - number and place value Pupils should be taught to:</p> <ul style="list-style-type: none"> 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; count in multiples of 2s, 5s and 10s given a number, identify 1 more and 1 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 <p>Number - addition and subtraction Pupils should be taught to:</p> <ul style="list-style-type: none"> read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs represent and use number bonds and related subtraction facts within 20 add and subtract one-digit and two-digit numbers to 20, including 0 solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = ? - 9$ <p>Number - multiplication and division Pupils should be taught to:</p> <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 <p>Number - fractions Pupils should be taught to:</p> <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 <p>Measurement</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; • 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. <p>ELG: Numerical Patterns Children at the expected level of development will:</p> <ul style="list-style-type: none"> • 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. 	<p>and that those with one left over, are odd.</p> <ul style="list-style-type: none"> • Know the names of the days of the week in order. • Use positional language to describe when events happen e.g. now, next, before, later soon, after. • Develop a sense of time and use the vocabulary 'yesterday', 'today' and 'tomorrow' to describe when relative events happen. • Copy, continue and create simple repeating patterns (simple & complex). • Recognise, name & describe common 2D shapes, e.g. square, rectangle, circle and triangle. • Recognise, name & describe some 3D shapes, e.g. cube, sphere, cylinder, cone. • Use specific mathematical language relating to length and height. • Use non-standard unit to measure length and height. • Use specific mathematical language relating to weight. • Use non-standard units and balance scales to measure weight. • Use specific mathematical language relating to capacity. 		<p>Pupils should be taught to:</p> <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) • recognise and know the value of different denominations of coins and notes • 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 <p>Geometry - properties of shapes Pupils should be taught to:</p> <ul style="list-style-type: none"> • recognise and name common 2-D and 3-D shapes, including: <ul style="list-style-type: none"> • 2-D shapes [for example, rectangles (including squares), circles and triangles] • 3-D shapes [for example, cuboids (including cubes), pyramids and spheres] <p>Geometry - position and direction Pupils should be taught to: describe position, direction and movement, including whole, half, quarter and three-quarter turns</p>
--	--	--	--