

Stoke Park Infant School

Year 1 Progression of Skills in Maths



“The principal focus of mathematics teaching in key stage 1 is to ensure that pupils develop confidence and mental fluency with whole numbers, counting and place value. This should involve working with numerals, words and the four operations, including with practical resources [for example, concrete objects and measuring tools].

At this stage, pupils should develop their ability to recognise, describe, draw, compare and sort different shapes and use the related vocabulary. Teaching should also involve using a range of measures to describe and compare different quantities such as length, mass, capacity/volume, time and money. By the end of year 2, pupils should know the number bonds to 20 and be precise in using and understanding place value. An emphasis on practice at this early stage will aid fluency. Pupils should read and spell mathematical vocabulary, at a level consistent with their increasing word reading and spelling knowledge at key stage 1.”

(Mathematics programmes of study: key stages 1 and 2. National curriculum in England. September 2013)

End of Year R (ELG, Mathematics)	Subject Content	Year 1 Autumn Term	Year 1 Spring Term	Year 1 Summer Term
<p>Explore the composition of numbers to 10.</p> <p>Automatically recall number bonds for numbers 0- 5/0-10.</p> <p>Have a deep understanding of number 10, including the composition of each number.</p> <p>Subitise (recognise quantities without counting) up to 5.</p> <p>Automatically recall – without reference to rhymes, counting or other aids – number bonds up to 5.</p>	<p>Number and place value</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 • 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 	<ul style="list-style-type: none"> • count in multiples of twos, and tens 	<ul style="list-style-type: none"> • count, read and write numbers to 100 in numerals; • count in multiples of twos, fives and tens • Count within 100, forwards and backwards, starting with any number. • Reason about the location of numbers to 20 within the linear number system, including comparing using < > and = • Count forwards and backwards in multiples of 2, 5 and 10, up to 10 multiples, beginning with any multiple, and count forwards and backwards through the odd numbers.

<p>Recall some number bonds to 10, including doubling facts.</p> <p>Verbally count beyond 20, recognising the pattern of the counting system.</p> <p>Become familiar with two-digit numbers.</p> <p>Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as another quantity.</p> <p>Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.</p>	<p>Addition and Subtraction</p>	<ul style="list-style-type: none"> • read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs • add and subtract one digit numbers 	<ul style="list-style-type: none"> • represent and use number bonds and related subtraction facts within 20 • add and subtract one-digit and two-digit numbers to 20, including zero 	<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 $7 = \quad - 9$ • Develop fluency in addition and subtraction facts within 10. • Compose numbers to 10 from 2 parts and partition numbers to 10 into parts, including recognizing odd and even numbers • Read, write and interpret equations containing addition (+), subtraction (-) and equals (=) symbols, and relate additive expressions and equations to real-life contexts.
	<p>Multiplication and Division</p>	<ul style="list-style-type: none"> • count reliably in two's • share objects equally by counting how many in each group 	<ul style="list-style-type: none"> • solve one-step problems involving multiplication, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher. 	<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.

	Fractions	<ul style="list-style-type: none"> recognise, find and name a half as one of two equal parts of an object, shape or quantity 	<ul style="list-style-type: none"> recognise, find and name a quarter as one of four equal parts of an object, shape or quantity. 	<ul style="list-style-type: none"> 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.
	Measurement	<ul style="list-style-type: none"> Compare, describe and solve practical problems for: <ul style="list-style-type: none"> Lengths and heights (e.g. long/short, longer/shorter, tall/short, double/half) Time (quicker, slower, earlier, later) Measure and begin to record the following: <ul style="list-style-type: none"> Lengths and heights Time (hours) Recognise and know the value of different denominations of coins and notes Sequence events in chronological order using language such as: 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 	<ul style="list-style-type: none"> Compare, describe and solve practical problems for: <ul style="list-style-type: none"> mass / weight time (minutes) 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, describe and solve practical problems for: <ul style="list-style-type: none"> capacity/volume (full/empty, more than, less than, quarter) 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) Compare, describe and solve practical problems for lengths and height; mass or weight; capacity or volume Know the days of the week and months in the year

	<p>Geometry: Shape</p>	<ul style="list-style-type: none"> Recognise and name common 2-D shapes including squares and circles 	<ul style="list-style-type: none"> Recognise and name common 2-D shapes including rectangles, squares, circles and triangles 	<ul style="list-style-type: none"> Recognise and name common 3-D shapes including cuboids, cubes, pyramids and spheres. Recognise common 2D and 3D shapes presented in different orientations, and know that rectangles, triangles, cuboids and pyramids are not always similar to one another.
	<p>Geometry: Position and Direction</p>			<ul style="list-style-type: none"> Describe position, directions and movements, including half, quarter and three-quarter turns. Compose 2D and 3D shapes from smaller shapes to match an example, including manipulating shapes to place them in particular orientations.