

## Maths Progression of Skills

	EYFS	Year 1	Year 2
Number and Place Value	<ul style="list-style-type: none"> <li>Recognise and count reliably with numbers 1-20 and place them in order.</li> <li>Count objects reliably.</li> <li>Say which number is one more or less than a given number.</li> </ul>	<ul style="list-style-type: none"> <li>count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.</li> <li>count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens.</li> <li>given a number, identify one more and one less.</li> <li>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.</li> <li>read and write numbers from 1 to 20 in numerals and words.</li> </ul>	<ul style="list-style-type: none"> <li>count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward.</li> <li>recognise the place value of each digit in a two-digit number (tens, ones).</li> <li>identify, represent and estimate numbers using different representations, including the number line.</li> <li>compare and order numbers from 0 up to 100; use &lt;, &gt; and = signs.</li> <li>read and write numbers to at least 100 in numerals and in words.</li> <li>use place value and number facts to solve problems.</li> </ul>
Key Vocabulary	<p>number, zero, one, two.....to twenty and beyond, none, How many...? count, count (up) to, count on, count back (from, to), count in ones...twos..., one more than..., one less than..., many, few, every other first, second....tenth, pattern, puzzle answer, right, wrong, as many as greater, greatest, large, larger, largest, big, bigger, biggest, small, smaller, smallest, more, less, order, before, after, next, between, above, below, last, last but one.</p>	<p>numbers to 100 and beyond, units, ones, tens digit, 'teens' number, exchange, fewer most, least, first...second...eleventh...twentieth half-way between, roughly, count on in twos...fives...tens, odd, even, forwards, backwards, repeating pattern, number line number square, number track</p>	<p>hundreds, thousand, sequence continue predict, partition, sequence, consecutive, value, rule, one-, two-, three-digit number, place, place value stands for represents, twenty-first, twenty-second....., exact, exactly, round, nearest, &gt; and &lt;, numeral</p>

<p><b>Addition and Subtraction</b></p>	<ul style="list-style-type: none"> <li>• using quantities and objects children add and subtract two single digit numbers and count on or back to find the answer.</li> <li>• begin to use the vocabulary involved in addition and subtraction.</li> </ul>	<ul style="list-style-type: none"> <li>• read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs.</li> <li>• represent and use number bonds and related subtraction facts within 20.</li> <li>• add and subtract one-digit and two-digit numbers to 20, including zero.</li> <li>• solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems</li> <li>• such as <math>7 = \square - 9</math>.</li> </ul>	<ul style="list-style-type: none"> <li>• solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures and; applying their increasing knowledge of mental and written methods.</li> <li>• recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.</li> <li>• add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers.</li> <li>• 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.</li> </ul>
<p><b>Key Vocabulary</b></p>	<p>add, altogether, d How many more to make?, How many more is...than...? take (away), leave, How many have gone?, How many fewer is...than...? ...is the same as..., guess how many nearly, close to, about the same as too many, too few, enough, not enough, left. left over.</p>	<p>+ add, plus, total, - take away, subtract, minus, difference between, How much less is...?, = equal to, sign, operation, number bond, put together, more than/ less than, number sentence, number fact</p>	<p>addition, sum, one hundred more one hundred less, subtraction tens boundary, calculate, calculation correct, symbol, difference, inverse</p>

<b>Multiplication and Division</b>	<ul style="list-style-type: none"> <li>• solve problems involving doubling halving and sharing.</li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.</li> <li>• calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (<math>\times</math>), division (<math>\div</math>) and equals (=) signs.</li> <li>• show that multiplication of two numbers can be done in any order (commutative) and division of one number by another</li> <li>• solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.</li> </ul>
<b>Key Vocabulary</b>	count out, share out.	equal to, multiple, share, sharing, group grouping, array	lots of, groups of, x times, multiply, multiplied by, multiplication, multiple of product, once, twice, three times...ten times as big... long... wide... as..., repeated addition, row, column, share equally, one each, two each, three each... group in pairs, threes...tens, equal groups of $\div$ divide, divided by, divided into, division inverse
<b>Fractions</b>	<ul style="list-style-type: none"> <li>• solve problems involving doubling halving and sharing.</li> </ul>	<ul style="list-style-type: none"> <li>• recognise, find and name a half as one of two equal parts of an object, shape or quantity.</li> <li>• recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.</li> </ul>	<ul style="list-style-type: none"> <li>• recognise, find, name and write fractions <math>\frac{1}{3}</math>, <math>\frac{1}{2}</math>, <math>\frac{2}{4}</math> and <math>\frac{3}{4}</math> of a length, shape, set of objects or quantity.</li> <li>• write simple fractions e.g. <math>\frac{1}{2}</math> of 6 = 3 and recognise the equivalence of two quarters and one half.</li> </ul>
<b>Key Vocabulary</b>	double, half, halve,	fraction, half, halve, quarter, whole	part, equal parts, fraction, one whole one half, two halves, one quarter, two... three... four... quarters, one third

<p><b>Measurement</b></p>	<ul style="list-style-type: none"> <li>• use everyday language to talk about size, weight, capacity, position, distance, time and money.</li> <li>• compare objects and quantities to solve problems.</li> <li>• order two or three items by length, weight, height and capacity.</li> <li>• orders and sequence events within a day.</li> </ul>	<ul style="list-style-type: none"> <li>• compare, describe and solve practical problems for: 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].</li> <li>• measure and begin to record the following: lengths and heights; mass/weight; capacity and volume; time (hours, minutes, seconds).</li> <li>• recognise and know the value of different denominations of coins and notes</li> <li>• sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]</li> <li>• recognise and use language relating to dates, including days of the week, weeks, months and years.</li> <li>• tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.</li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• compare and order lengths, mass, volume/capacity and record the results using <math>&gt;</math>, <math>&lt;</math> and <math>=</math>.</li> <li>• recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value.</li> <li>• find different combinations of coins that equal the same amounts of money</li> <li>• solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.</li> <li>• compare and sequence intervals of time</li> <li>• 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.</li> <li>• know the number of minutes in an hour and the number of hours in a day.</li> </ul>
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<b>Key Vocabulary</b>	<p>clock, watch, hands, time Monday, Tuesday etc, day, week, birthday, holiday, morning, afternoon, evening, night bedtime, dinnertime, playtime today, yesterday, tomorrow, before, after, next, first, last, now, soon early, late, quick, quicker, quickest, quickly, fast, faster, fastest slow, slower, slowest, slowly old, older, oldest, new, newer, newest, takes longer, takes less time, hour, o'clock, thick, thin long, longer, longest, short, shorter, shortest, tall, taller, tallest high, higher, highest, far, near, close, weigh, weighs, balances heavy, heavier, heaviest, light, lighter, lightest, balance, scales, weight, full, half-full, empty holds</p>	<p>names of coins, roughly, length, width, height mass/weight (used interchangeably), capacity/volume (used interchangeably), line, metre, ruler, metre stick, weighing scale, container, spring, summer, autumn, winter month, year, weekend, midnight, fast, faster, fastest, half past, How long ago...?, How long will it be to...?, How long will it take to...? How often...?, always, never, sometimes, usually, once, twice.</p>	<p>£ and p, note (and the names of notes) bought, sold, change, measuring scale about, further, furthest, m to represent metre, centimetre (cm), tape measure mass, weight, kilogram (kg), half-kilogram, gram (g), capacity, volume, contains litre (l), half-litre, millilitre (ml), January, February...December, fortnight, minute second, quarter to, quarter past, digital clock, analogue clock, temperature, thermometer, °C</p>
<b>Geometry- Properties of shape</b>	<ul style="list-style-type: none"> <li>• recognise, create and describe patterns</li> <li>• explore the characteristics of everyday objects and shapes 2-D/3-D and use mathematical language to describe them</li> </ul>	<ul style="list-style-type: none"> <li>• recognise and name common 2-D and 3-D shapes, including: 2-D shapes [for example, rectangles (including squares), circles and triangles]; 3-D shapes [for example, cuboids (including cubes), pyramids and spheres].</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line</li> <li>• identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces</li> <li>• identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]</li> <li>• compare and sort common 2-D and 3-D shapes and everyday objects.</li> <li>•</li> </ul>
<b>Key Vocabulary</b>	<p>shape, pattern, flat, curved, straight, round, hollow, solid corner, face, side, end, make, build, draw, cube, pyramid, sphere, cone circle, triangle, square, rectangle symmetrical, repeating pattern match, sort</p>	<p>point, pointed, cuboid, cylinder, sort, set</p>	<p>property, surface, circular, triangular, rectangular, oblong, pentagon, hexagon, octagon, quadrilateral, kite, polygon, prism vertical, horizontal, edge, vertex, vertices 2D, 3D, line of symmetry, mirror line,, reflection.</p>

<b>Position and Direction</b>	<ul style="list-style-type: none"> <li>• Select, rotate and manipulate shapes in order to develop spatial reasoning skills</li> <li>• Describe position, direction and movement including forwards, backwards, sideways, in front, behind, under, over, beside, next to, in between.</li> <li>• Begin to introduce left and right.</li> </ul>	<ul style="list-style-type: none"> <li>• describe position, direction and movement, including half, quarter and three-quarter turns.</li> </ul>	<ul style="list-style-type: none"> <li>• order and arrange combinations of mathematical objects in patterns and sequences</li> <li>• 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)</li> </ul>
<b>Key Vocabulary</b>	over, under, above, below top, bottom, side, on, in, outside, inside, around, in front, behind, between, front, back, beside, next to, opposite, middle, left, right, up, down, forwards, backwards, sideways, across, along, through, close, far, near, to, from, towards, away from	underneath, centre, journey, turn whole turn, half turn, quarter turn, three-quarter turn, clockwise, anti-clockwise position, direction	route, higher, lower, straight line, map, plan, compass point, north, south, east, west, (NSEW)
<b>Statistics</b>	<ul style="list-style-type: none"> <li>• Introduction to simple tally charts.</li> </ul> <p>(Key concepts that create solid foundations in EYFS to build upon for the NC Objectives)</p>		<ul style="list-style-type: none"> <li>• interpret and construct simple pictograms, tally charts, block diagrams and tables.</li> <li>• ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.</li> <li>• ask-and-answer questions about totalling and comparing categorical data.</li> </ul>

Key Vocabulary			table, column, row, diagram, tally, tally chart block diagram, pictogram, represent label, title, scale, most popular, least popular, most common, least common category
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