



Reception	
Number	<p>Counts objects, actions and sounds</p> <p>Is able to subitise (recognise how many objects there are in a small group without counting)</p> <p>Is able to link the number symbol (numeral) with its cardinal number value</p> <p>Can count beyond ten</p> <p>Is able to compare numbers</p> <p>Understands the 'one more than/one less than' relationship between consecutive numbers</p> <p>Is able to explore the composition of numbers to 10</p> <p>Automatically recalls number bonds for numbers 0-10</p> <p>Automatically recalls (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 (ELG)</p> <p>Has a deep understanding of number to 10, including the composition of each number (ELG)</p> <p>Is able to subitise (recognise quantities without counting) up to 5 (ELG)</p>
Numerical Patterns	<p>Can select, rotate and manipulate shapes in order to develop spatial reasoning skills</p> <p>Investigates composing and decomposing shapes and recognises a shape can have other shapes within it, just as numbers can</p> <p>Is able to continue, copy and create repeating patterns</p> <p>Can compare length, weight and capacity</p>



	<p>Can compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity (ELG)</p> <p>Is able to explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally (ELG)</p> <p>Verbally counts beyond 20, recognising the pattern of the counting system (ELG)</p>
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Place Value	<p>Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number</p> <p>Count and read numbers to 100 in numerals</p> <p>Count and write numbers to 100 in numerals</p> <p>Count in multiples of twos, fives and tens from 0</p> <p>Identify one more and one less of a given number</p> <p>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</p> <p>Read and write numbers from 1 to 20 in numerals</p> <p>Read and write numbers from 1 to 20 in words</p> <p>Count in twos, fives and tens to solve problems e.g. count the number of chairs in a diagram when the chairs are organised in 7 rows of 5 by counting in fives</p>	<p>Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward</p> <p>Recognise the place value of each digit in a two-digit number (tens, ones)</p> <p>Identify, represent and estimate numbers using different representations, including the number line</p> <p>Compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs</p> <p>Read and write numbers to at least 100 in numerals</p> <p>Read and write numbers to at least 100 in words</p> <p>Use place value and number facts to solve problems</p> <p>Partition two-digit numbers into different combinations of tens and ones using apparatus if needed e.g. 23 is the same as 2 tens and 3 ones which is the same as 1 ten and 13 ones</p>



	<p>Partition and combine numbers using apparatus if required e.g. partition 76 into tens and ones; combine 6 tens and 4 ones</p>	<p>Use reasoning about numbers and relationships to solve more complex problems and explain his/her thinking e.g. $29 + 17 = 15 + 4 + ?$; 'Together Jack and Sam have £14. Jack has £2 more than Sam. How much money does Sam have?' etc.</p> <p>Recall the multiples of 10 below and above any given 2 digit number e.g. say that for 67 the multiples are 60 and 70</p>
Addition & Subtraction	<p>Read and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs</p> <p>Write mathematical statements involving addition (+), subtraction (-) and equals (=) signs</p> <p>Demonstrate an understanding of the commutative law (e.g. $3 + 2 = 5$, therefore $2 + 3 = 5$)</p> <p>Demonstrate an understanding of inverse relationships involving addition and subtraction (e.g. if $3 + 2 = 5$, then $5 - 2 = 3$)</p> <p>Recall at least four of the six number bonds for 10 and reason about associated facts (e.g. $6 + 4 = 10$, therefore $4 + 6 = 10$ and $10 - 6 = 4$)</p> <p>Represent and use number bonds within 20</p> <p>Represent and use subtraction facts within 20</p> <p>Add one-digit and two-digit numbers to 20, including zero</p> <p>Subtract one-digit and two-digit numbers to 20, including zero</p>	<p>Solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures</p> <p>Solve problems with addition and subtraction applying his/her increasing knowledge of written methods and mental methods where regrouping may be required</p> <p>Recall all number bonds to and within 10 and use these to reason with and calculate bonds to and within 20, recognising other associated additive relationships (e.g. If $7 + 3 = 10$, then $17 + 3 = 20$; if $7 - 3 = 4$, then $17 - 3 = 14$; leading to if $14 + 3 = 17$, then $3 + 14 = 17$, $17 - 14 = 3$ and $17 - 3 = 14$)</p> <p>Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100</p> <p>Add and subtract numbers where no regrouping is required, using concrete objects, pictorial representations, and mentally, including a two-digit number and one</p> <p>Add and subtract numbers using concrete objects, pictorial representations, and mentally, including a two-digit number and tens</p>



	<p>Solve one-step problems that involve addition, subtraction and missing numbers using concrete objects and pictorial representations</p>	<p>Add and subtract numbers using concrete objects, pictorial representations, and mentally, including two two-digit numbers</p> <p>Add and subtract numbers using concrete objects, pictorial representations, and mentally, including adding three one-digit numbers</p> <p>Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot</p> <p>Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems</p> <p>Recall doubles and halves to 20 e.g. knowing that double 2 is 4, double 5 is 10 and half of 18 is 9</p> <p>Use estimation to check that his/her answers to a calculation are reasonable e.g. knowing that $48 + 35$ will be less than 100</p> <p>Solve missing number problems using addition and subtraction</p>
Multiplication & Division	<p>Solve one-step problems involving multiplication by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher</p> <p>Solve one-step problems involving division by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher</p>	<p>Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers</p> <p>Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals ($=$) signs</p> <p>Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot</p>



		<p>Solve problems involving multiplication and division, using concrete materials and mental methods</p> <p>Solve problems involving multiplication and division, using arrays, repeated addition and multiplication and division facts, including problems in contexts e.g. knowing that $2 \times 7 = 14$ and $2 \times 8 = 16$, explains that making pairs of socks from 15 identical socks will give 7 pairs and one sock will be left</p> <p>Use multiplication and division facts for 2, 5 and 10 to make deductions outside known multiplication facts e.g. know that multiples of 5 have one digit of 0 or 5 and use this to reason that 18×5 cannot be 92 as it is not a multiple of 5</p> <p>Solve word problems involving multiplication and division with more than one step e.g. which has the most biscuits, 4 packets of biscuits with 5 in each packet or 3 packets of biscuits with 10 in each packet</p> <p>Recognise the relationships between addition and subtraction and rewrite addition statements as simplified multiplication statements e.g. $10 + 10 + 10 + 5 + 5 = 3 \times 10 + 2 \times 5 = 4 \times 10$</p>
Fractions	<p>Recognise, find and name a half as one of two equal parts of an object, shape or quantity.</p> <p>Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.</p>	<p>Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity and demonstrate understanding that all parts must be equal parts of the whole</p> <p>Write simple fractions for example, $\frac{1}{2}$ of $6 = 3$ and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$</p>
Measurement	<p>Compare, describe and solve practical problems for lengths and heights e.g. long/short, longer/shorter, tall/short, double/half</p>	<p>Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature ($^{\circ}\text{C}$); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels</p>



	<p>Compare, describe and solve practical problems for mass/weight e.g. heavy/light, heavier than, lighter than</p> <p>Compare, describe and solve practical problems for capacity and volume e.g. full/empty, more than, less than, half, half full, quarter</p> <p>Compare, describe and solve practical problems for time e.g. quicker, slower, earlier, later</p> <p>Measure and begin to record mass/weight</p> <p>Measure and begin to record capacity and volume</p> <p>Measure and begin to record time (hours, minutes, seconds)</p> <p>Recognise and know the value of different denominations of coins and notes</p> <p>Sequence events in chronological order using language e.g. before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening</p> <p>Recognise and use language relating to dates, including days of the week, weeks, months and years</p> <p>Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times</p> <p>Measure and begin to record length/height</p>	<p>Compare and order lengths, mass, volume/capacity and record the results using $>$, $<$ and $=$</p> <p>Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value</p> <p>Find different combinations of coins that equal the same amounts of money</p> <p>Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change</p> <p>Compare and sequence intervals of time</p> <p>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</p> <p>Remember the number of minutes in an hour and the number of hours in a day</p> <p>Read scales in divisions of ones, twos, fives and tens</p> <p>Read scales where not all numbers on the scale are given and estimate points in between</p> <p>Read the time on a clock to the nearest 15 minutes</p>
Shape	<p>Recognise and name common 2-D shapes e.g. rectangles (including squares), circles and triangles</p>	<p>Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line</p>



	Recognise and name common 3-D shapes e.g. cuboids (including cubes), pyramids and spheres	<p>Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces</p> <p>Name some common 2-D and 3-D shapes from a group of shapes or from pictures of the shapes and describe some of their properties (e.g. triangles, rectangles, squares, circles, cuboids, cubes, pyramids and spheres)</p> <p>Identify 2-D shapes on the surface of 3-D shapes e.g. a circle on a cylinder and a triangle on a pyramid</p> <p>Compare and sort common 2-D and 3-D shapes and everyday objects describing similarities and differences e.g. find 2 different 2-D shapes that only have one line of symmetry; that a cube and a cuboid have the same number of edges, faces and vertices and describe what is different about them</p>
Position & Direction	Describe position, direction and movement, including whole, half, quarter and three-quarter turns	<p>Order and arrange combinations of mathematical objects in patterns and sequences</p> <p>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)</p>
Statistics		<p>Interpret and construct simple pictograms, tally charts, block diagrams and simple tables</p> <p>Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity</p> <p>Ask and answer questions about totalling and comparing categorical data</p>