|  | Reception | Year 1 | Year 2 |
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| Number and place value | -Children begin using numbers and counting up to 5 . <br> -Children compare quantities of identical objects and non-identical objects. <br> -Children begin using numbers and counting up to 10. <br> -Children compare groups of objects and numbers up to 10 . <br> -Children are introduced to doubling, halving and sharing numbers and objects within numerical patterns. <br> -Children learn which numbers are odd and which numbers are even as well as understanding why. | -Count to hundred, forwards and backwards, beginning with 0 or 1 , or from any given number. -Count, read and write numbers to 100 in numerals and words. <br> -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. <br> -Given a number, identify one more or one less. <br> -Recognise odd and even numbers <br> -Count in multiples of twos, fives and tens. | -Count in steps of 2,3 and 5 from 0 and in tens from any number, forward and backward. <br> -Recognise the place value of each digit in a two digit number (tens, ones.) <br> -Identify, represent and estimate numbers to 100 using different representations including the number line. <br> -Read and write numbers to at least 100 in numerals and words. <br> -Compare and order numbers from 0 up to 100; use and = signs. <br> -Partition any two-digit number into different combinations of tens and ones, explaining their thinking verbally, in pictures or using apparatus. -Use place value and number facts to solve problems. |
| Addition and subtraction | -Children find one more and one less. <br> -Children find changes within 5. <br> -Children combine two groups to find the whole amount. <br> -Children are introduced to the part whole model and learning how to use it with numbers up to 10. -Children learn how to add by counting on. <br> -Children learn how to take away by counting back | -Represent and use number bonds and related subtraction facts (within 20). <br> -Add and subtract one digit numbers (to 20), including zero. <br> -Read, write and interpret mathematical statements involving addition (+), subtraction () and equals (=) signs. <br> -Solve one step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7=$ ? -9 . | -Add and subtract any 2 two-digit numbers using an efficient strategy, explaining their method verbally, in pictures or using apparatus (e.g. $48+35 ; 72-17$ ). <br> -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. <br> -Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. <br> -Recall and use addition and subtraction facts to 20 fluently and derive and use related facts up to 100 . <br> -Show that the addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot. |


|  |  |  | -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. -Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures; applying their increasing knowledge of mental and written methods. |
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| Multiplication and division | -Children continue learning how to sort objects into groups | -Count in multiples of twos, fives and tens. <br> -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 | -Recall multiplication and division facts for 2,5 and 10 and use them to solve simple problems, demonstrating an understanding of commutativity as necessary. <br> -Recognising odd and even numbers. <br> - Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication ( $x$ ), division ( $\div$ ) and equals (=) sign. <br> -Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts. -Show that the multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot |
| Fractions, decimals and percentages |  | -Recognise, find and name a half as one of two equal parts of an object, shape or quantity. <br> -Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity. | -Identify $1 / 4,1 / 3,1 / 2,2 / 4,3 / 4$, of a number or shape, and know that all parts must be equal parts of the whole. <br> -Write simple fractions for example, $\frac{1}{2}$ of $6=$ 3. -Recognise, find, name and write fractions $1 / 3,1 / 4,2 / 4$ and of a length, shape, set of objects or quantity. |


|  |  |  | -Recognise the equivalence of two quarters and one half |
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| Geometry | -Children recap positional language. -Children begin to understand spatial awareness. | -Describe position, direction and movement, including whole, half, quarter and three quarter turns | -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 threequarter turns (clockwise and anti-clockwise). -Order and arrange combinations of mathematical objects |
| Shape | -Children are introduced to 2D shapes and 3D shapes learning their names and recognising them. <br> -Children begin making simple patterns then once confident, explore more complex patterns | -Recognise and name common 2D and 3D shapes, including rectangles, squares, circles and triangles, cuboids, pyramids and spheres | -Name and describe properties of 2-D and 3-D shapes, including number of sides, vertices, edges, faces and lines of symmetry. <br> -Describe similarities and differences of 2-D and 3-D shapes, using their properties. -Identify 2D shapes on the surface of 3D shapes, e.g. a circle on a cylinder and a triangle on a pyramid. <br> -Compare and sort common 2D and 3D shapes and everyday objects. <br> -Order and arrange combinations of mathematical objects in patterns and sequences. |
| Statistics |  |  | -Interpret and construct simple pictograms, tally charts, block diagrams and simple tables. -Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. <br> - Ask and answer questions about totalling and comparing categorical data |
| Measurement | -Children learn about their day and when events occur. <br> -Children are introduced to length, height, distance, weight, volume and capacity using numbers, objects and practical exploration | -Compare, describe and solve practical problems for: lengths and heights for example, long/ short, longer/shorter, tall/short, double/half. <br> -Measure and begin to record lengths and heights. | -Use different coins to make the same amount. -Recognise and use symbols of pounds (£) and pence ( $p$ ); combine amounts to make a particular value. <br> -Find different combinations of coins that equal the same amounts of money. |


|  |  | -Compare, describe and solve practical problems for mass/weight, e.g. heavy/light, heavier than, lighter than; capacity and volume, e.g. full/empty, more than, less than, half, half full, quarter. <br> -Measure and begin to record mass/weight, capacity and volume <br> -Recognise and know the value of different denominations of coins and notes. <br> -Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times. <br> -Recognise and use language relating to dates, including days of the week, weeks, months and years. <br> -Compare, describe and solve practical problems for time, e.g. quicker, slower, earlier, later. <br> -Measure and begin to record time (hours, minutes, seconds). <br> -Sequence events in chronological order using language, e.g. before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening | -Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change. <br> -Read scales in divisions of twos, fives and tens. <br> -Read scales where not all numbers on the scale are given and estimate points in between. <br> -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. -Know the number of minutes in an hour and the number of hours in a day. <br> -Compare and sequence intervals of time. <br> -Choose and use appropriate standard units to estimate and measure capacity (litres $/ \mathrm{ml}$ ) and temperature $\left({ }^{\circ} \mathrm{C}\right)$ to the nearest appropriate unit, using thermometers and measuring vessels. <br> -Compare and order volume/capacity and record the results using >, < and =. <br> -Choose and use appropriate standard units to estimate and measure length/height in any direction ( $\mathrm{m} / \mathrm{cm}$ ) and mass ( $\mathrm{kg} / \mathrm{g}$ ) to the nearest appropriate unit, using rulers and scales. <br> -Compare and order length and mass and record the results using >, < and = |
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