## Progression of Skills - Mathematics

|  | Reception | Year 1 | Year 2 |
| :---: | :---: | :---: | :---: |
| Place Value: Counting | Count to 20 and beyond Count forwards and backwards to 10 then 20 <br> Know that the last number counted tells you how many there are (cardinal number) <br> Count objects, actions and sounds | Count to and across 100, forwards and backwards, beginning with 0 or 1, from any given number. <br> Count numbers to 100 in numerals, 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 |
| Place Value: Represent | Subitise to 5 <br> Show fingers to 10 <br> Link numeral to objects <br> Experiment with own symbols and marks as well as numerals <br> Read and write numbers to 10 then 20 | Identify and represent numbers using objects and pictorial representations. Read and write numbers to 100 in numerals Read and write numbers from 1 to 20 in numerals and in words. | Read and write numbers to at least 100 in numerals and in words. Identify, represent and estimate numbers using different representations including the number line. |
| Place Value: Use Place Value and Compare | Compare quantities using 'more than, fewer than' <br> Recognise when one quantity is greater than, less than or the same as another quantity Understand 1 more/1 less relationship between consecutive numbers | Given a number, identify one more and one less <br> Begin to use > < and = signs | Recognise the place value of each digit in a twodigit number (tens, ones) <br> Compare and order numbers from 0 up to 100 Use > < and = signs |
| Place Value: Problems and Rounding |  |  | Use Place value and number facts to solve problems |


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| Addition \& Subtraction: <br> Recall, Represent, Use | Explore the composition of numbers to 10 - part whole, 5 frames, ten frames Automatically recall number bonds for numbers 0-10 | Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs. Represent and use number bonds and related subtraction facts within 20 | Recall and use addition and subtraction facts to 20 fluently and derive and use related facts up to 100 <br> 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 these to check calculations and solve missing number problems. |
| Addition and <br> Subtraction: <br> Calculations | Addition - Count on, use objects to combine 2 groups to find the whole <br> Subtraction - Count back, use objects to take away <br> Use concrete and pictorial representations to add and subtract | Add and subtract one digit and two-digit numbers to 20 including zero | Add and subtract numbers using concrete objects, pictorial representations and mentally including: <br> - A two digit number and ones <br> - A two digit number and tens <br> - Two two digit numbers <br> - Adding three one digit numbers |
| Addition and Subtraction: Solve Problems | Solve real world maths problems | Solve one step problems that involve addition and subtraction using concrete objects and pictorial representations and missing number problems such as $7=$ ? - 9 | Solve problems with addition and subtraction; Use concrete objects and pictorial representations including those involving numbers quantities and measures to solve problems using addition and subtraction Apply increasing knowledge of metal and written methods when solving problems with addition and subtraction |


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|  <br> Division: <br> Recall, Represent, Use | Automatically recall double facts <br> Explore and represent patterns including: <br> odds and evens, doubles, halves and how <br> quantities can be distributed equally <br> (sharing) | Count in 2s, 5s, 10s | Recall and use multiplication and division facts <br> for the 2,5 and 10 Multiplication tables, <br> including recognising odd and even numbers. <br> Show that multiplication of two numbers can be <br> done in any order (Commutative) and division <br> of one number by another cannot. |
|  <br> Division: <br> Calculations |  | Calculate mathematical statements for <br> multiplication and division within the <br> multiplication tables and write them using the <br> multiplication (x), division ( $\div$ ) and (=) signs |  |
|  <br> Division: <br> Solve Problems |  | Soltiplication and division by calculating <br> the answer using concrete objects, <br> pictorial representations and arrays with <br> the support of the teacher | Solve problems involving multiplication and <br> division, using materials, arrays, repeated <br> addition, mental methods, and multiplication <br> and division facts, including problems in <br> contexts |


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| Fractions: Recognise <br> and Write |  | Recognise, find and name a half as one of <br> two equal parts of an object, shape or <br> quantity <br> Recognise, find and name a quarter as <br> one of four equal parts of an object, <br> shape or quantity | Recognise, find name and write fractions $1 / 3,1 / 4$, <br> 2/4, and $3 / 4$ of a length, shape, set of objects or <br> quantity |
| Fractions: Compare |  |  | Recognise the equivalence of $2 / 4$ and $1 / 2$ |
| Fractions: <br> Calculations |  |  | Write simple fractions eg. $1 / 2$ of $6=3$ |


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| Measurement: Using Measures | Make comparisons between objects relating to size, length, weigh and capacity Compare length, weight and capacity Order 2 or 3 items by length, weight and capacity | Compare, describe and solve practical problems for: <br> Lengths and heights, Mass/weight, Capacity and volume, Time Measure and begin to record the following: <br> Lengths and heights, Mass/weight, Capacity and volume, Time (hours, minutes, seconds) | Choose and use appropriate standard units to estimate and measure length/height in any direction ( $\mathrm{m} / \mathrm{cm}$ ), mass ( $\mathrm{kg} / \mathrm{g}$ ), temperature ©, capacity (Litres $/ \mathrm{ml}$ ) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels <br> Compare and order lengths, mass, volume/capacity and record the results using > < and = |
| Measurement: Money | Use everyday language to talk about money | Recognise and know the different denominations of coins and notes | Recognise and use symbols for pounds ( $£$ ) and pence (p) <br> Combine amounts to make a particular value. Find different combinations of coins that equal the same amounts of money <br> Solve simple problems in a practical context involving addition and subtraction of money of the same unit including giving change |
| Measurement: Time | Use everyday language to talk about time Begin to describe a sequence of events (real or fictional) using words like 'first, then' | Sequence events in chronological order and use language (e.g. before and after, next, first, today, yesterday, tomorrow, morning, afternoon, evening) <br> Recognise and use language relating to dates including days of the week, weeks, months and years. <br> Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times | Compare and sequence intervals of time. <br> Tell and write the time to five minutes including quarter past/to the hour and draw the hands on the clock face to show these times. <br> Know the number of minutes in an hour and the number of hours in the day. |


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| Geometry: 2 D Shapes | Talk about and explore 2D shapes using <br> informal and mathematical language (sides, <br> corners, straight, curved, flat, round) <br> Find 2D shapes within 3D shapes <br> Talk about and identify patterns around <br> them <br> Continue, copy and create repeating <br> patterns | Recognise and name common 2 D shapes <br> (e.g., rectangles (including squares), <br> circles and triangles) | Identify and describe the properties of 2D <br> shapes, including the number of sides and line <br> symmetry in a vertical line. <br> Identify 2D shapes on the surface of 3D shapes <br> (e.g., a circle on a cylinder and a triangle on a <br> pyramid) <br> Compare and sort common 2D shapes and <br> everyday objects. |
| Geometry: 3 D Shapes | Talk about and explore 3D shapes using <br> informal and mathematical language | Recognise and name common 3D shapes <br> (e.g., cuboids (including cubes), pyramids <br> and spheres) | Recognise and name common 3D shapes (e.g., <br> cuboids (including cubes) pyramids and <br> spheres) <br> Compare and sort common 3D shapes and <br> everyday objects |


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| Statistics:: Present <br> and Interpret |  | Begin to interpret class block diagrams | Interpret and construct simple pictograms, tally <br> charts, block diagrams and simple tables. |
| Statistics:: Solve <br> Problems |  |  | Ask and answer simple questions by counting <br> the number of objects in each category and <br> sorting the categories by quantity <br> Ask and answer questions about totalling and <br> comparing categorical data |


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| Algebra |  | Solve one step problems that involve <br> addition and subtraction, using concrete <br> objects and pictorial representations, and <br> missing number problems such as $7=$ ?-9 | Recognise and use the inverse relationship <br> between addition and subtraction and use this <br> to check calculations and solve missing number <br> problems |
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