

- Suggested oral mental starters (ongoing, throughout the term):**
- Count forwards from 0, and backwards, in twos, fives and tens to the 12<sup>th</sup> multiple; count forwards from 0 in threes to the 12<sup>th</sup> multiple
  - Recall multiplication and division facts for the 2, 5 and 12 times tables
  - Recognise odd/even numbers and relate to multiples/groups of two
  - Say the number that is 10 more/less than any number within 100 (refer to the hundred square)
  - Count on and back in 10s from any one or two digit number (refer to the hundred square)
  - Recall and use all pairs of numbers with a total of 20; give addition and subtraction facts
  - Derive and use pairs of multiples of ten that total 100; give addition and subtraction facts (e.g.  $40 + 60 = 100$ ;  $100 - 40 = 60$ )
  - Add three one-digit numbers, using knowledge of number pairs e.g.  $7 + 3 + 5 = 10 + 5 = 15$
  - Recall and use all pairs of numbers with a total of 20 and all pairs of numbers within 20; give addition and subtraction facts for the pair of numbers
  - Make estimates of quantities within 50 (and beyond) by grouping objects into 2s, 5s or 10s
  - Recall the doubles of multiples of 10 to 100 (e.g. double 20 is 40) and recall the related halves (e.g. half of 40 is 20)
  - Read the time to the hour, the half hour and the quarter hour (past and to) using an analogue clock (use daily routines to reinforce)

Areas of Study	No of days	Statutory requirements and non-statutory guidance	Suggested Key Vocabulary
<p><b>Number</b></p> <p>Number and place value</p> <p><b>Week 1</b></p>	5	<p>Read and write numbers to 100 in numerals <b>and</b> words</p> <p>Given a number, identify the number that is <b>10 more or less</b> within 100</p> <p>Say the number that comes between two numbers within 100; count on and back in tens from any one- or two-digit number (<b>refer to hundred square</b>)</p> <p>Recognise the place value of each digit in a two-digit number using <b>practical apparatus</b> e.g. straws, cubes, ten sticks and units, Dienes, Unifix, arrow/ place value cards</p> <p>Partition two-digit numbers into tens and ones/units e.g. <math>56 = 50 + 6</math>; <math>38 = \square + 8</math>; <math>63 = 60 + \square</math></p> <p>Extend by <b>partitioning numbers in different ways</b> e.g. <math>56 = 50 + 6</math>; <math>56 = 40 + 16</math></p> <p>Order numbers from 0 up to 100 and position them on a number line and/or a 100 square</p> <p>Compare numbers from 0 up to 100; <b>introduce</b> the <math>&lt;</math>, <math>&gt;</math> and <math>=</math> signs and use them when comparing two numbers</p> <p>Reason about numbers e.g. <math>32 &gt; 23</math> true or false? How do you know?</p> <p>If you wrote these numbers in order, starting with the smallest, which one would come third: 62, 18, 99, 26, 80. Explain how you ordered the numbers</p>	<p>Number, numerals</p> <p>Zero, one, two.....to one hundred</p> <p>Ten more, ten less</p> <p>Between, before, after</p> <p>Place value</p> <p>Digit, tens, ones/units</p> <p>Order, compare</p> <p>Greater than (<math>&gt;</math>)</p> <p>Less than (<math>&lt;</math>)</p>

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<p><b>Number</b></p> <p>Addition &amp; subtraction</p> <p><b>Week 2</b></p>	<p>5</p>	<p>Solve addition/subtraction problems using knowledge of place value e.g. There are 56 children in the playground. 10 more children come and join them. How many children are on the playground now? How did you work it out?</p> <p>Mentally add a two-digit number and ones within 100; a two-digit number and tens within 100, including the use of an <b>empty number line</b></p> <p>Mentally add two two-digit numbers within 100 using an <b>empty number line</b>; consider the use of the 100 square to support (<b>See Calculation Policy</b>); use <b>estimation</b> to check that the answer is reasonable e.g. know that <math>34 + 25 = 58</math> is incorrect because <math>4 + 5 \neq 9</math>; <math>40 + 50 &lt; 100</math> because <math>50 + 50 = 100</math></p> <p>Mentally subtract a two-digit number and ones within 100; a two-digit number and tens within 100, including the use of an <b>empty number line</b></p> <p>Mentally subtract two two-digit numbers within 100, initially where there is no regrouping required, using an <b>empty number line</b>; extend to examples where regrouping is required; consider the use of a 100 square to support (<b>See Calculation Policy</b>); use <b>estimation</b> to check that the answer is reasonable e.g. <math>85 - 32 = 62</math> is incorrect because <math>80 - 30 = 50</math></p> <p>Solve <b>one-step</b> word problems, which involve addition or subtraction, <b>including in the context of money</b>; <b>extend</b> with two-step problems for children 'working at greater depth'</p>	<p>Problem, solution</p> <p>Addition, +, add, plus, more, put together, altogether, total, count on</p> <p>=, equals, is the same as, calculation, number sentence</p> <p>Subtraction, -, take away, subtract, minus, count back</p> <p>How many are left?</p> <p>Estimate, estimation</p> <p>Empty number line</p> <p>Problem, answer/solution</p>
<p><b>Measurement</b></p> <p>Mass</p> <p><b>Week 3</b></p>	<p>5</p>	<p>Use kilogram (kg) as a unit of measurement for mass e.g. find everyday objects that weigh more than/ less than/ about a kilogram (relate to everyday objects)</p> <p>Introduce gram (g) as a unit of measurement e.g. What weighs about 1g? What weighs about 100g?</p> <p>Choose and use appropriate standard units to estimate and <b>measure</b> mass (kg/g) to the nearest appropriate unit, using weighing scales where scales are in divisions of ones, two, fives or tens</p> <p>Compare and order mass using comparative language and symbols <math>&lt;</math>, <math>&gt;</math> and <math>=</math></p> <p>Follow a line of enquiry relating to mass e.g. Is an apple heavier than a pear? How will you find out? Is this true or false? A pair of trainers is heavier than a kilogram. How will you find out?</p> <p>Solve word problems in the context of mass e.g. my snack bag of fruit and nuts contains 25g of raisins and 35g of peanuts. How much does my snack bag weigh?</p> <p>Alesha weighs 36 kg and her mother weighs 58 kg. How much lighter than her mother is she?</p>	<p>Estimate, compare, measure, weigh, mass</p> <p>Gram (g), kilogram (kg)</p> <p>Heavier than, lighter than</p> <p>Heaviest, lightest</p> <p><math>&lt;</math>, <math>&gt;</math></p> <p>Weighing scales, balance, scales</p> <p>Problem, answer/solution</p>

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<p><b>Number</b></p> <p>Multiplication</p> <p><b>Week 4</b></p>	<p>5</p>	<p>Count forwards and backwards to and from 0 in twos, fives and tens to the 12<sup>th</sup> multiple; <b>begin</b> to count in multiples of three (consider as mental/oral activities)</p> <p>Recognise number patterns using known multiples e.g. What are the missing numbers? 35, 30, 25, □, 15, 10, □</p> <p>Recall and use multiplication facts for the 2, 5 and 10 multiplication tables (including x 0) Calculate mathematical statements for multiplication and write them using the signs; solve missing number problems using known facts; show that multiplication of two numbers can be done in any order (e.g. <math>2 \times 5 = 10</math> and <math>5 \times 2 = 10</math>) i.e. multiplication is commutative</p> <p><b>Consolidate</b> multiplication as repeated addition and as arrays using known multiples e.g. twos, fives and tens</p> <p><b>Extend</b> by using an empty number line to count on using known multiples <b>(See Calculation Policy)</b></p> <p>Solve <b>one -step</b> multiplication word problems using practical resources, informal written methods (including pictures and arrays), empty number lines and x and = signs</p>	<p>Lots of, groups of, repeated addition, times, multiply, multiplied by, multiplication, x, =, multiple</p> <p>Array, row, column</p> <p>Empty number line, count on</p> <p>Problem, answer/solution</p>
<p><b>Number</b></p> <p>Division</p> <p><b>Week 5</b></p>	<p>5</p>	<p>Count forwards and backwards to and from 0 in twos, fives and tens to the 12<sup>th</sup> multiple; <b>begin</b> to count in multiples of three (consider as mental/oral activities)</p> <p>Recall and use division facts for the 2, 5 and 10 multiplication tables Calculate mathematical statements for division and write them using the <math>\div</math> and = signs and solve missing number problems using known facts</p> <p><b>Consolidate</b> division as sharing, grouping, including the use of arrays</p> <p><b>Extend</b> by using an empty number line to count back (repeated subtraction) using known multiples <b>(See Calculation Policy)</b></p> <p>Solve <b>one -step</b> division word problems using practical resources, informal written methods (including pictures and arrays), empty number lines and signs <math>\div</math> and =</p> <p><b>Introduce</b> remainders to children 'working at greater depth' in a practical/ problem solving context</p>	<p>Share, groups of, divide, divided by, share equally, repeated subtraction, division, <math>\div</math>, =</p> <p>Array, row, column</p> <p>Empty number line, count back</p> <p>(remainders- for children working at GD)</p> <p>Problem, answer/solution</p>



<p>Properties of 3D shapes</p> <p><b>Week 7</b></p>	<p>2</p>	<p>Identify and describe the properties of <b>3D shapes</b>, including the number of edges, vertices and faces</p> <p>Identify 2D shapes on the surface of 3D shapes and use 'circular', 'rectangular', 'triangular' to describe faces</p> <p>Compare and sort 3D shapes (including everyday objects) according to their properties using simple Venn diagrams or sorting circles e.g. shapes that have square faces; shapes that have circular faces; shapes that have triangular faces</p> <p><b>Reason</b> about 3-D shapes e.g. What is the same about these two shapes; what is different about these two shapes?</p>	<p>All vocabulary related to 3D shapes from previous terms including: prism, edges, faces, vertices</p> <p>Extend with: circular, rectangular, triangular (faces)</p>
<p><b>Statistics</b></p> <p>Data handling</p> <p><b>&amp; Number</b></p> <p>Addition/ subtraction</p> <p><b>Week 8</b></p>	<p>3</p> <p>2</p>	<p>Use <b>tally charts</b> to collect information; interpret simple tally charts</p> <p>Construct simple block diagrams using given/collected information; interpret block diagrams and answer questions by counting the number of objects in each category</p> <p>Begin to interpret simple block diagrams with scales of divisions of two</p> <p>Begin to answer simple questions about totalling and comparing the data e.g. how many children altogether chose cats and dogs? How many more children chose dogs than hamsters? (<b>Possible link to the Science curriculum</b>)</p> <p>Add three one-digit numbers, using knowledge of number pairs e.g. <math>7 + 3 + 5 = 10 + 5 = 15</math></p> <p>Recall and use all pairs of numbers with a total of 20 and all pairs of numbers within 20; give addition <b>and</b> subtraction facts e.g. <math>12 + \square = 20</math>; <math>\square + 3 = 16</math>; <math>20 - \square = 15</math></p> <p>Show that addition of two numbers can be done in any order e.g. <math>15 + 5 = 20</math>, <math>5 + 15 = 20</math></p> <p>Solve problems that involve recall of facts and that addition of numbers can be done in any order e.g. How many different ways could we put 20 fish into two ponds? Choose two of the following numbers and add them together: 8, 12, 7, 10. What is the total? Repeat with two different numbers. How many different totals can you make using these numbers? How do you know that you have found all of the totals?</p>	<p>Block diagram Tally chart Data Collect (data)</p> <p>Addition, +, add, plus, more, put together, altogether, total, sum of, =, equals, is the same as Subtraction, -, take away, subtract, minus</p> <p>Problem, answer/solution Calculate</p>

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<p><b>Measurement</b></p> <p>Time</p> <p>&amp;</p> <p><b>Geometry</b></p> <p>Position and direction</p> <p><b>Week 9</b></p>	<p>3</p> <p>2</p>	<p>Use units of time (minutes &amp; hours) and know the relationships between them; know that there are 60 minutes in an hour <b>and</b> 24 hours in one day</p> <p>Read the time to the hour, the half hour and the quarter hour (past and to) using an analogue clock</p> <p><b>Begin</b> to tell the time to the <b>nearest five minutes</b> using an <b>analogue</b> clock (past the hour and then to the hour) for children 'working at greater depth'</p> <p>Use mathematical language to describe movement using half, quarter and three quarter turns, clockwise and anti-clockwise (relate to telling the time/ the clock face)</p> <p>Apply rotations <b>in practical contexts</b> and relate quarter turns to right angles e.g. giving instructions to other pupils, programming robots</p>	<p>O'clock, half past, quarter past, quarter to</p> <p>Analogue clock, minute, hour, day</p> <p>Turn, whole turn, half turn, quarter turn, three-quarter turn</p> <p>Clockwise, anti-clockwise</p> <p>Right angles</p>
<p><b>Measurement</b></p> <p>Capacity</p> <p>&amp;</p> <p>Temperature</p> <p><b>Week 10</b></p>	<p>3</p> <p>2</p>	<p>Use litre (l) as a unit of measurement e.g. find containers that hold more than/less than a litre; find containers that hold about a litre/ half a litre (relate to everyday containers)</p> <p><b>Introduce</b> millilitres (ml) as a unit of measurement in practical contexts and using real life containers</p> <p>Choose and use appropriate standard units to estimate and <b>measure</b> capacity (l/ml) to the nearest appropriate unit, where scales are in divisions of ones, two, fives or tens, using measuring jugs and cylinders</p> <p>Compare and order capacity using comparative language and symbols &lt;, &gt; and = (using everyday containers)</p> <p>Follow a line of enquiry relating to capacity e.g. Is it true that my flask holds more tea than my mug? How could you find out? Using a litre of apple juice, how many cups can you fill?</p> <p>Introduce ° C as a unit of measurement for temperature; read a thermometer (positive temperatures only) to the nearest appropriate unit; relate temperature to the months/seasons of the year (possible link to science)</p>	<p>Estimate, compare, measure</p> <p>Capacity/ volume</p> <p>litre (l), millilitre (ml)</p> <p>More than, less than</p> <p>° C, temperature, thermometer</p> <p>Months (January, February...),</p> <p>Seasons (spring, summer, autumn, winter)</p>

