

**Oral mental starters (ongoing, throughout the term):**

- Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number
- Given a number identify the number that is 1 more or less within 100; say the number that comes between two numbers within 100
- Recall number bonds to ten; derive number bond within 10; derive number bonds to 20
- Double numbers and quantities to 10 + 10; find the corresponding halves (within 20)
- Count in twos, fives and tens to the 10<sup>th</sup> multiple, forwards and backwards
- Recognise odd and even numbers (within 20)
- Recognise and tell the time using half past and o'clock (use daily routines to support)
- Recognise and use language relating to dates, including days of the week and months of the year (use daily routines to support)
- Recognise, name and describe common 2-D and 3-D shapes; reason about shapes

Area of Study	No of days	Statutory Requirements and non-statutory guidance	Suggested Key Vocabulary
<p><b>Number</b></p> <p>Number</p> <p><b>Week 1</b></p>	<p>3 - 5</p>	<p>Count to 100, forwards and backwards, beginning with 0 or 1, or from any given number (consider as mental/oral starters)</p> <p>Read and write numbers to 100 <b>in numerals</b></p> <p>Read and write numbers to twenty <b>in words</b> and match to the numerals</p> <p>Given a number, say/ identify the number that is 1 more or less within 100; say the number that comes between two numbers within 100</p> <p>Use the language of fewer, most, least, equal to, more than, less than</p> <p>Order number within 100</p> <p><b>Reason</b> about numbers e.g. What is wrong with this sequence of numbers? 30, 29, 27, 26, 25. How do you know? If you put these numbers in order starting with the smallest, which number would come third? 15, 5, 35, 25, 45 How did you work it out?</p>	<p>Number, numeral</p> <p>One hundred (100)</p> <p>Count, one more, one less</p> <p>More than, less than, fewer, most, least, equal to, between, before, after</p>

<p><b>Number</b></p> <p>Number and place value</p> <p><b>Week 2</b></p>	<p>5</p>	<p>Recognise place value in teen numbers and in two-digit numbers beyond 20, using practical apparatus e.g. straws, cubes, ten sticks and ones, base ten materials, Dienes apparatus, Unifix, Numicon, arrow cards</p> <p>Solve missing number problems using knowledge of place value e.g. <math>10 + \square = 16</math>; <math>18 - \square = 10</math>; <math>20 + 4 = \square</math></p> <p>Identify numbers (within 100) using objects and pictorial representations, such as Numicon, the number line/track, 100 square, base ten materials, Dienes, cubes</p> <p>Reason about numbers e.g. If Ella puts these numbers in order starting with the smallest number, which one would come third? 41, 14, 4, 44, 40. How do you know?</p>	<p>Ones/units, tens, digit</p> <p>Missing numbers</p> <p>Number track, number line, 100 square</p>
<p><b>Number</b></p> <p>Addition and Subtraction</p> <p><b>Week 3</b></p>	<p>5</p>	<p>Use all Y1 vocabulary relating to addition and subtraction</p> <p>Add and subtract a one-digit number, including zero, to and from numbers to at least 20, by counting on or back using a marked number track or a marked number line e.g. <math>18 + 4 = 22</math>; <math>23 + 5 = 28</math>; <math>18 - 4 = 14</math>; <math>23 - 5 = 18</math>; <math>24 + 0 = 24</math>; <math>17 - 0 = 17</math></p> <p>Introduce complimentary addition to find <b>small differences</b> using concrete objects/ number tracks/lines, e.g. the difference between ten and twelve is two; the difference between 14 and 17 is 3; the difference between 18 and 22 is 4</p> <p><b>(See Written Calculation Policy, 2017 and Mental Calculation Strategies, 2017)</b></p> <p>Solve one-step word problems (including in the context of money), involving addition and subtraction, using concrete objects, and pictorial representations to support, including the use of marked number tracks/lines (to at least 20) e.g.</p> <p>There are 18 people downstairs on the bus and 6 people upstairs on the bus. How many people are on the bus altogether?</p> <p>There are 20 people waiting at the bus stop. 5 people get on the bus. How many people are left waiting at the bus stop? How did you work it out?</p>	<p>+, add, plus, more, altogether, total, count on</p> <p>-, take away, subtract, minus, count back, find the difference How many are left?</p> <p>=, equals, is the same as</p> <p>Number sentence, number track, number line</p> <p>Problem, answer</p>

<p><b>Number</b></p> <p>Multiplication and Division</p> <p>&amp;</p> <p>Odd/even numbers</p> <p><b>Week 4</b></p>	<p>3</p> <p>2</p>	<p>Count in twos, fives and tens to the 10<sup>th</sup> multiple, forwards and backwards (consider as mental/oral starters); use the counting stick to support</p> <p>Use <b>arrays</b> to support early multiplication and division; use the vocabulary related to multiplication and division (but not the signs)</p> <p><b>(See Written Calculation Policy, 2017, Mental Calculation Strategies, 2017 and Multiplication Tables Guidance 2020)</b></p> <p>Solve <b>simple</b> problems involving multiplication and division by calculating the answer using concrete objects, pictorial representations and arrays e.g.</p> <p>There are seven children lining up for lunch. How many feet can I count altogether? I have four 5p pieces in my purse. How much money do I have altogether? I share 15 apples between 5 children. How many apples will each child have?</p> <p>Begin to recognise <b>odd and even numbers</b> up to 20 and relate to counting in twos, using practical resources to support (e.g. Numicon, cubes, pairs of socks) Sort odd and even numbers using sorting circles</p>	<p>Share, equal groups of, sets of, arrays</p> <p>Problem, answer</p> <p>Odd numbers/ even numbers Pairs</p>
<p><b>Number</b></p> <p>Fractions</p> <p><b>Week 5</b></p>	<p>5</p>	<p>Consolidate finding and naming <b>one half</b> as one of two equal parts of an object or shape Find a half of a small number/quantity (within 20) using practical resources to support and relate to equal sharing e.g. half of 12 is <input type="text"/></p> <p>Solve <b>simple</b> problems involving finding half of a quantity e.g. I have 12 apples and I give half of them to my friend. How many apples does he have? How many apples do I have?</p> <p>Consolidate finding and naming <b>one quarter</b> as one of four equal parts of an object or shape Find a quarter of a small quantity (within 20), using practical resources to support, and relate to equal sharing e.g. a quarter of eight is two; a quarter of 12 is 3; how would you find a quarter of 20?</p>	<p>Half, quarter (but <b>not</b> the symbols <math>\frac{1}{2}</math>, <math>\frac{1}{4}</math> until Y2) Equal parts, whole</p> <p>Half of Quarter of</p>
<p><b>Measurement</b></p> <p>Time</p> <p><b>Week 6</b></p>	<p>5</p>	<p>Tell the time <b>to the hour</b> and <b>half past the hour</b> using the clock face; show the time/ draw hands on clock faces to show these times Extend by introducing <b>quarter past</b> the hour - taken from Y2 programme of study NB use daily routines to support telling the time</p> <p>Introduce <b>seconds</b> as a unit of time; investigate practical problems involving seconds (consider using sand timers) e.g. How many times can you write your name in 30 seconds? How many beads can you thread in one minute/ 60 seconds? How many star jumps can you do in ten seconds?</p>	<p>Clock, watch, long hand, short hand o'clock, half past, quarter past</p> <p>Hours, minutes, seconds</p>

<p><b>Geometry</b></p> <p>Position and Direction</p> <p>&amp;</p> <p>Properties of shapes (2D and 3D)</p> <p><b>Week 7</b></p>	<p>1</p> <p>2</p> <p>2</p>	<p>Relate whole, half and quarter turns to telling the time and the language related to it e.g. clockwise Introduce and <b>begin</b> to use three quarter turns in <b>practical contexts</b></p> <p>Visualise and use everyday positional language and the language of turns to describe the position and movement of objects/people e.g. practical position and direction activities in P.E. and computing using robot technology (forwards, backwards, left, right, whole turn, half turn, quarter turn and three quarter turn, clockwise)</p> <p>Consolidate recognising and naming common 2-D shapes (including shapes of different sizes and in different orientations) and describe their properties; sort 2-D shapes according to their properties; use 2D shapes to make repeating patterns Introduce pentagon and hexagon (taken from Y2 programmes of study)</p> <p>Consolidate recognising and naming common 3-D shapes (including shapes of different sizes) and describe their properties including faces and corners; begin to use edges, vertices (taken from Y2 programme of study)</p> <p>Describe shapes using the related vocabulary e.g. I am a 3-D shape. I have six faces. All my faces are square. What am I? I am a 2-D shape. I have four sides. All my sides are equal. What am I? I am a 3-D shape. I can roll. What shape could I be? How do you know?</p>	<p>Forwards, backwards, left, right</p> <p>Whole, half, quarter and three quarter turns, clockwise</p> <p>Shape, 2D shape, flat shape Circle, triangle, square, rectangle (Pentagon, hexagon taken from Y2 programmes of study)</p> <p>Side, corner, curved, straight</p> <p>3D shape, cuboid, cube, pyramid, sphere, cone, cylinder</p> <p>Faces, flat, curved Corners (Edges, vertices taken from Y2 programmes of study)</p>
<p><b>Measurement</b></p> <p>Weight and Capacity</p> <p><b>Week 8</b></p>	<p>5</p>	<p>Introduce the standard unit of <b>kilogram</b>; identify objects that weigh more/less than a kilogram and objects that weigh exactly one kilogram (consider everyday items such as a bag of rice) Estimate, measure and begin to record the weight of objects, choosing and beginning to use suitable <b>standard units</b> (kilograms) and measuring instruments (weighing scales)</p> <p>Introduce the standard unit of <b>litre</b>; identify containers that hold less/more than a litre and containers that hold exactly one litre Estimate, measure and begin to record the capacity of different containers, choosing and beginning to use suitable <b>standard units</b> (litres) and measuring instruments (litre jugs);</p> <p>Investigate problems involving weight and capacity <b>in practical contexts</b>, e.g. Which of these objects weigh more than a kilogram? How will you find out? How many children can have a cup of fruit juice from this 1 litre carton? How will you find out? Which container holds the most- my cup or my beaker?</p>	<p>Compare, measure, estimate Weight/mass Kilogram, more than a kilogram, less than a kilogram</p> <p>Capacity/volume Measuring jug Litre, more than a litre, less than a litre</p>

<p><b>Number</b></p> <p>Addition and subtraction (including number facts)</p> <p><b>Week 9</b></p>	<p>5</p>	<p>Use the vocabulary relating to addition and subtraction</p> <p>Consolidate adding/ subtracting a one-digit number to/from a two-digit number, including <b>finding the difference</b> between two quantities for subtraction e.g. <math>18 + 3</math>; <math>19 + 7</math>; <math>24 + 0 = 24</math>; <math>29 - 6 = 23</math>; <math>21 - 19 = 2</math></p> <p><b>(See Written Calculation Policy, 2017 and Mental Calculation Strategies, 2017)</b></p> <p>Represent and use number bonds and related addition/subtraction facts within 20 e.g. <math>3 + 17 = 20</math> so... <math>17 + 3 = 20</math>; <math>20 - 17 = 3</math>; <math>20 - 3 = 17</math></p> <p>Solve missing number problems e.g. <math>\square = 8 + 4</math>; <math>17 + \square = 20</math>; <math>\square - 5 = 15</math></p> <p>Solve number <b>problems</b> involving number facts e.g.</p> <p>Find all of the dominoes that have a total of seven spots and write the addition number sentences to match the dominoes</p> <p>I have 12 pencils- find different ways that I can put them into two pots</p> <p>How many different ways could you put 20 fish into two ponds?</p> <p>(encourage systematic recording)</p>	<p>+, add, plus, more than, put together, altogether, total, count on</p> <p>- , take away, subtract, minus, count back, difference, less than</p> <p>How many are left?</p> <p>=, equals, is the same as</p> <p>Number sentence</p> <p>Missing number</p> <p>Problem, solution</p>
<p><b>Measurement</b></p> <p>Money &amp; Length</p> <p><b>Week 10</b></p>	<p>3</p> <p>2</p>	<p>Recognise and know the value of all different coins to £1 and introduce notes (£5, £10, £20)</p> <p>Solve simple practical problems in the context of money up to 20p (and beyond) e.g. How much will I pay altogether if I buy _ and _? Which coins could you use to pay for this toy car that costs 12p? How much money is in my purse? If one banana costs 10p, how much would four bananas cost? How much change from 20p would you get if you bought one banana?</p> <p>Begin to solve problems involving finding different combinations of coins that equal the same amount of money e.g. 'Lottie's Lollipops', 'Pippa's Purse'</p> <p><b>(See Mathematical Challenges for all pupils booklet, 2016)</b></p> <p>Introduce <b>standard units</b> of length (metres, centimetres) and measuring instruments (rulers, metre stick)</p> <p>Find/identify objects that are longer than/shorter than one metre</p> <p>Estimate, measure and record the length and height of objects (to the nearest appropriate unit)</p> <p><b>Investigate</b> problems involving length e.g.</p> <p>Which is longer ~ your foot or your hand span? How will you find out?</p> <p>The school hall is longer than 20 metres. True or false? How will you find out?</p>	<p>Money, coins to £1, note, change, value, pound (£), pence (p), cost, combination, difference, total, altogether, buy</p> <p>Compare, measure, estimate</p> <p>Metre, centimetre, metre stick, ruler, more than a metre, less than a metre, longer than/shorter than</p>

