

TERM: Summer 1

YEAR: 2

WEEK 1	OBJECTIVES	NON-STATUTORY GUIDANCE AND SUPPORT FOR LEARNING
Number Place Value	<ul style="list-style-type: none"> Count in steps of 2, 3 and 5 from 0, and in tens from any number, forward or backward Compare and order numbers from 0 to 100; use \leq, \geq and $=$ signs Read and write numbers to at least 100 in numerals and in words Use place value and number facts to solve problems 	<p><i>Using materials and a range of representations, pupils practice counting, reading, writing and comparing numbers to at least 100 and solving a variety of related problems to develop fluency. They should count in multiples of three to support their later understanding of a third.</i></p> <p><i>As they become more confident with numbers up to 100. They should be introduced to larger numbers to develop further their recognition of patterns within the number system and represent them in different ways, including spatial representations.</i></p> <p><i>Pupils should partition numbers in different ways (for example $23 = 20 + 3$ and $23 = 10 + 13$. They become fluent and apply their knowledge of numbers to reason with, discuss and solve problems that emphasise the value of each digit in two-digit numbers.</i></p> <p>They begin to understand zero as a place holder. (Continue to use manipulatives to aid understanding of partitioning.)</p> <p>NRICH: Buzzy Bee *</p> <p>NRICH: Sort Them Out (1) *</p> <p>NRICH: Domino Sequences *</p> <p>NRICH: Domino Number Patterns **</p> <p>NRICH: Next Domino *</p> <p>NRICH: 100 Square Jigsaw *</p> <p>NRICH: That Number Square! *</p> <p>NRICH: I Like ... *</p> <p>NRICH: Light the Lights ***</p> <p>NRICH: Largest Even *</p> <p>Mathematical Challenges for the More Able: Fireworks- 18 Ben's Numbers-23</p>

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WEEK 2	OBJECTIVES	NON-STATUTORY GUIDANCE AND SUPPORT FOR LEARNING
<p>Number Addition and Subtraction</p>	<ul style="list-style-type: none"> • Solve problems with addition and subtraction: <ul style="list-style-type: none"> - using concrete objects and pictorial representation, including those involving numbers, quantities and measures. - applying their increasing knowledge of mental and written methods. • Add and subtract numbers using concrete objects, pictorial representations and mentally: <ul style="list-style-type: none"> - Adding three one-digit numbers - a two-digit number and tens - Two two-digit numbers • Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. 	<p><i>Pupils extend their understanding of the language of addition subtraction to include sum and difference</i></p> <p><i>Pupils practice addition and subtraction to 20 to become increasingly fluent in deriving facts such as using $3 + 7 = 10$ $10 - 7 = 3$ and $7 = 10 - 3$ to calculate $30 + 7 = 100$; $100 - 70 = 30$ and $70 = 100 - 30$.</i></p> <p><i>They check their calculations, including by adding to check subtraction and adding numbers in a different order to check addition (for example $5 + 2 + 1 = 1 + 5 + 2 = 1 + 2 + 5$). This establishes commutativity and associativity of addition.</i></p> <p><i>Recording addition and subtraction in <u>columns</u> supports place value and prepares for formal written methods with larger numbers.</i></p> <p>Use of a balance and manipulatives to aid missing number problems</p> <p>NRICH: Getting the Balance *** NRICH: Noah ** NRICH: Eggs in Baskets ** NRICH: The Brown Family *** NRICH: Birthday Cakes ** NRICH: Sitting Round the Party Tables * NRICH: Cuisenaire Counting *** NRICH: Cuisenaire Environment * NRICH: Jumping Squares ** NRICH: Number Balance ** NRICH: The Add and Take-away Path * NRICH: Secret Number ** NRICH: How Many? * NRICH: What Was in the Box? * NRICH: Doing and Undoing *</p> <p>Mathematical Challenges for the More Able: Number Lines-11 Cross Road- 17</p>

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WEEK 3	OBJECTIVES	NON-STATUTORY GUIDANCE AND SUPPORT FOR LEARNING
<p>Number Multiplication and Division</p>	<ul style="list-style-type: none"> Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot Solve problems involving multiplication using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts 	<p><i>Pupils use a variety of language to describe multiplication and division.</i></p> <p><i>Pupils are introduced to the multiplication tables. They practice to become fluent in the 2, 5, 10 multiplication tables and connect them to each other.</i></p> <p><i>They connect the 10 multiplication table to place value, and the 5 multiplication table to the divisions on the clock face. They begin to use other multiplication tables and recall multiplication facts, including using related written and mental calculations.</i></p> <p><i>Pupils work with a range of materials and contexts in which multiplication and division relate to grouping and sharing discrete and continuous quantities and relating these to fractions and measures (for example $40 \div 2 = 20$, 20 is half of 40).</i></p> <p><i>They use commutativity and inverse relations to develop multiplicative reasoning (for example, $4 \times 5 = 20$ and $20 \div 5 = 4$)</i></p> <p>NRICH: Odd Times Even *** NRICH: Two Numbers Under the Microscope ** NRICH: Even and Odd * NRICH: Ring a Ring of Numbers * NRICH: More Numbers in the Ring *** NRICH: How Odd ** NRICH: Doing and Undoing * NRICH: Clapping Times * NRICH: Ordering Cards * NRICH: Which Symbol? * NRICH: I'm Eight * NRICH: Our Numbers * NRICH: Are You Well Balanced? *** NRICH: Magic Plant ** NRICH: The Amazing Splitting Plant *** NRICH: The Tomato and the Bean *** NRICH: Lots of Lollies *** NRICH: Ip Dip *</p> <p>Mathematical Challenges for the More Able: Ones and twos- 20 Birthday-21 At the Toy Shop- 23</p>

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WEEK 4	OBJECTIVES	NON-STATUTORY GUIDANCE AND SUPPORT FOR LEARNING
Number Fractions	<ul style="list-style-type: none"> Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a lengths, shape, set of objects or quantity. Write simple fractions e.g. $\frac{1}{2}$ of 6 =3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$ 	<p><i>Pupils use fractions as 'fractions of' discrete and continuous quantities by solving problems using shapes, objects and quantities. They connect unit fractions to equal sharing and grouping, to numbers when they can be calculated, and to measures, finding fractions of lengths, quantities, sets of objects or shapes. They meet $\frac{3}{4}$ as the first example of a non-unit fraction.</i></p> <p><i>Pupils should count in fractions up to 10, starting from any number and using the $\frac{1}{2}$ and $\frac{2}{4}$ equivalence on the number line (for example, $1 \frac{1}{4}$, $1 \frac{2}{4}$ (or $1 \frac{1}{2}$), $1 \frac{3}{4}$, 2). This reinforces the concept of fractions as numbers and that they can add up to more than one.</i></p> <p>NRICH: Making Longer, Making Shorter **</p>

WEEK 5	OBJECTIVES	NON-STATUTORY GUIDANCE AND SUPPORT FOR LEARNING
Statistics	<ul style="list-style-type: none"> 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. Ask and answer questions about totaling and comparing categorical data. 	<p><i>Pupils record, interpret, collate, organise and compare information (for example, using many-to-one correspondence in pictograms with simple ratios 2, 5, 10).</i></p> <p>NRICH: Sticky Data * NRICH: If the World Were a Village * NRICH: Plants ** NRICH: Plants ** NRICH: What Shape and Colour? * NRICH: Carroll Diagrams * NRICH: The Hair Colour Game ** NRICH: Mixed-up Socks ** NRICH: Sort the Street * NRICH: Button-up * NRICH: Beads and Bags * NRICH: Ladybird Count * NRICH: In the Playground *</p> <p>Real Life: Make cross curricular links with Science/ Humanities etc. Make tally charts/ graphs related to topic work. More able children should move onto graphs with scales going up in different intervals 2s/ 5s/10s</p>

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WEEK 6	OBJECTIVES	NON-STATUTORY GUIDANCE AND SUPPORT FOR LEARNING
<p>Geometry</p> <p>Position and movement</p>	<ul style="list-style-type: none"> Identify and describe the properties of 2D shapes including the number of sides and line symmetry in a vertical line. Identify and describe the properties of 3D shapes including the number of edges, vertices and faces. 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><i>Pupils view and name a wide variety of 2D & handle and name a wide variety of common 3D shapes including: quadrilaterals and polygons, and cuboids, prisms and cones, and identify the properties of each shape (for example, number of sides, number of faces). Pupils identify, compare and sort shapes on the basis of their properties and use vocabulary precisely, such as sides, edges, vertices and faces.</i></p> <p><i>Pupils read and write names for shapes that are appropriate for their word reading and spelling.</i></p> <p><i>Pupils should work with patterns of shapes, including those in different orientations.</i></p> <p><i>Pupils draw lines and shapes using a straight edge.</i></p> <p>Link back to work on time (quarter past and quarter to the hour)</p> <p>NRICH: Shapely Lines *</p> <p>NRICH: Chain of Changes **</p> <p>NRICH: Colouring Triangles **</p> <p>NRICH: Exploded Squares *</p> <p>NRICH: Complete the Square ***</p> <p>NRICH: Let's Investigate Triangles *</p> <p>NRICH: Poly Plug Rectangles *</p> <p>NRICH: Square It *</p> <p>NRICH: Inside Triangles ***</p> <p>NRICH: Building with Solid Shapes *</p> <p>NRICH: Skeleton Shapes **</p> <p>NRICH: Rolling That Cube *</p> <p>NRICH: Turning Man *</p> <p>NRICH: Walking Round a Triangle *</p> <p>Mathematical Challenges for the More Able: Odd one out- 12 Line of Symmetry-13</p>