

WEEK 1	OBJECTIVES	NON STATUTORY GUIDANCE AND SUPPORT FOR LEARNING
<p>Number: Place Value in the context of measures</p>	<ul style="list-style-type: none"> <li>• Identify, represent and estimate numbers using different representations</li> <li>• Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)</li> <li>• Compare and order numbers up to 1000</li> <li>• Count from 0 in multiples of 4, 8, 50 and 100 find 10 or 100 more or less than a given number</li> <li>• Measure, compare, add &amp; subtract lengths (m, cm, mm), mass (kg,/g), volume/capacity (l/ml).</li> </ul>	<p><i>Pupils use larger numbers to at least 1000, applying partitioning related to place value using varied and increasingly complex problems , building on work in year 2 (for example, <math>146 = 100 + 40 + 6</math> and also <math>146 = 130 + 16</math>)</i></p> <p><i>Using a variety of representations, including those related to measure, pupils continue to count on ones, tens &amp; hundreds, so that they become fluent in the order and place value of numbers to 1000</i></p> <p><i>(e.g. use base 10 manipulatives and then place value counters for pupils to explore and investigate.)</i></p> <p><i>Pupils continue to measure using the appropriate tools and units, progressing to using a wider range of measures, including comparing and using mixed units (for example, 1kg and 200g) and simple equivalents of mixed units (for example, <math>5m=500cm</math>)</i></p> <p><b>NRICH: <a href="#">Take Three Numbers</a> *</b>  <b>NRICH: <a href="#">Three Neighbours</a> **</b>  <b>NRICH: <a href="#">Prison Cells</a> **</b>  <b>NRICH: <a href="#">Spot Thirteen</a> *</b>  <b>NRICH: <a href="#">Square Subtraction</a> ***</b>  <b>NRICH: <a href="#">Planning a School Trip</a> *</b>  <b>NRICH: <a href="#">Number Differences</a> *</b>  <b>NRICH: <a href="#">Sitting Round the Party Tables</a> *</b>  <b>NRICH: <a href="#">Dotty Six</a> *</b></p> <p><b>Challenges for more able pupils:</b>  <i>Maisie the Mouse – 38</i>  <i>Susie the Snake - 30</i></p>

WEEK 2	OBJECTIVES	NON STATUTORY GUIDANCE AND SUPPORT FOR LEARNING
<p>Number</p> <p>Addition &amp; Subtraction: Measures</p>	<ul style="list-style-type: none"> <li>• Pupils should be taught to:</li> </ul> <p>Add and subtract numbers mentally including:</p> <ul style="list-style-type: none"> <li>- a three-digit number and ones</li> <li>- a three-digit number and tens</li> <li>- a three-digit number and hundreds</li> </ul> <ul style="list-style-type: none"> <li>• Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction</li> <li>• Estimate the answer to a calculation and use inverse operations to check answers</li> <li>• Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction</li> <li>• Measure, compare, add and subtract, lengths, (m//cm/mm): mass (kg/g): volume/capacity (l/ml)</li> <li>• Measure the perimeter of simple 2D shapes</li> </ul>	<p><i>Pupils practice solving varied addition and subtraction questions. For mental calculations with two-digit numbers, the answers could exceed 100</i></p> <p><i>Pupils continue to measure using the appropriate tools and units, progressing to using a wider range of measures, including comparing and using mixed units (for example, 1kg and 200g) and simple equivalents of mixed units (for example, 5m=500cm)</i></p> <p>NRICH: <a href="#">How Do You See it?</a> *</p> <p>NRICH: <a href="#">Swimming Pool</a> *</p> <p>NRICH: <a href="#">First Connect Three</a> *</p> <p>NRICH: <a href="#">Sea Level</a> *</p> <p>NRICH: <a href="#">A Bit of a Dicey Problem</a> ***</p> <p>NRICH: <a href="#">Take Three Numbers</a> *</p> <p>NRICH: <a href="#">Three Neighbours</a> **</p> <p>NRICH: <a href="#">Prison Cells</a> **</p> <p>NRICH: <a href="#">Spot Thirteen</a> *</p> <p>NRICH: <a href="#">Square Subtraction</a> ***</p> <p>NRICH: <a href="#">Planning a School Trip</a> *</p> <p>NRICH: <a href="#">Magic Vs</a> **</p> <p>NRICH: <a href="#">Number Differences</a> *</p> <p>NRICH: <a href="#">Sitting Round the Party Tables</a> *</p> <p>NRICH: <a href="#">Dotty Six</a> *</p>

WEEK 3	OBJECTIVES	NON STATUTORY GUIDANCE AND SUPPORT FOR LEARNING
<p>Number (Measure)</p> <p>Addition &amp; Subtraction: Money</p>	<ul style="list-style-type: none"> <li>• Add and subtract amounts of money to give change, using both £ and p in practical contexts</li> <li>• Count up and down in tenths; recognize that tenths arise from dividing an object into 10 equal parts and in dividing one digit numbers or quantities by 10</li> </ul>	<p><i>Pupils continue to become fluent in recognizing the value of coins, by adding and subtracting amounts, including mixed units, and giving change using manageable amounts. They record £ and p separately. The decimal recording of money is introduced formerly in year 4.</i></p> <p><i>Pupils connect tenths to place value, decimal measures and to division by 10.</i></p> <p><b>Challenges for more able pupils:</b> <i>Rows of Coins - 26</i></p>

WEEK 4	OBJECTIVES	NON STATUTORY GUIDANCE AND SUPPORT FOR LEARNING
<p>Number</p> <p>Multiplication &amp; Division:</p> <p>Practical context of measures</p>	<ul style="list-style-type: none"> <li>Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects</li> <li>Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers x one-digit numbers, using mental and progressing to formal written methods</li> <li>Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables</li> </ul>	<p><i>Pupils develop efficient mental methods, for example, using commutativity and associativity (for example <math>4 \times 12 \times 5 = 4 \times 5 \times 12 = 20 \times 12 = 240</math>) and multiplication and division facts (for example using <math>3 \times 2 = 6</math>, <math>6 \div 3 = 2</math> and <math>2 = 6 \div 3</math>) to derive related facts (for example, <math>30 \times 2 = 60</math>, <math>60 \div 3 = 20</math> and <math>20 = 60 \div 3</math>)</i></p> <p><i>Pupils develop reliable <b>written</b> methods for multiplication and division, starting with calculations of two-digit numbers by one-digit numbers and progressing to the formal written methods of short multiplication and division</i></p> <p>Pupils solve simple problems in context, deciding which of the four operations to use and why. These include ,measuring and scaling contexts, (for example, four times as high, eight times as long etc. and corresponding problems in which m objects are connected to n objects (for example, 3 hats and 4 coats, how many different outfits? 12 sweets shared equally between 4 children; 4 cakes shared equally between 8 children.</p> <p>NRICH: <a href="#">A Square of Numbers</a> *</p> <p>NRICH: <a href="#">What do you Need?</a> *</p> <p>NRICH: <a href="#">This Pied Piper of Hamelin</a> **</p> <p>NRICH: <a href="#">Follow the Numbers</a> *</p> <p>NRICH: <a href="#">What's in the Box?</a> *</p> <p>NRICH: <a href="#">How Do You Do It?</a> *</p>

WEEK 5	OBJECTIVES	NON STATUTORY GUIDANCE AND SUPPORT FOR LEARNING
<p>Geometry :2-D shape and angles</p>	<ul style="list-style-type: none"> <li>Identify horizontal and vertical lines and pairs of perpendicular and parallel lines</li> <li>draw 2-D shapes</li> <li>Measure the perimeter of simple 2D shapes</li> <li>identify right angles, recognise that two right angles make a half-turn, three make three-quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle</li> <li>recognise angles as a property of shape or a description of a turn</li> </ul>	<p><i>Pupils knowledge of the properties of shapes is extended at this stage to symmetrical and non-symmetrical polygons and polyhedral.</i></p> <p><i>Pupils extend their use of the properties of shapes. They should be able to describe the properties of 2-D and 3-D shapes using accurate language, including lengths of lines, acute and obtuse for angles greater or lesser than a right angle.</i></p> <p><i>Pupils connect decimals and rounding to drawing and measuring straight lines in centimetres, in a variety of contexts.</i></p> <p>NRICH: <a href="#">National Flags</a> *</p> <p>NRICH: <a href="#">Square It</a> *</p>

WEEK 6	OBJECTIVES	NON STATUTORY GUIDANCE AND SUPPORT FOR LEARNING
<p>Geometry: 3-D shape</p>	<ul style="list-style-type: none"> <li>Make 3-D shapes using modeling materials; recognise 3-D shapes in different orientations and describe them</li> </ul>	<p><i>Pupils knowledge of the properties of shapes is extended at this stage to symmetrical and non-symmetrical polygons and polyhedra.</i></p> <p><i>Pupils extend their use of the properties of shapes. They should be able to describe the properties of 3-D shapes using accurate language.</i></p> <p>NRICH: <a href="#">Building Blocks</a> *</p> <p>NRICH: <a href="#">The Third Dimension</a> ***</p> <p>NRICH: <a href="#">Rolling That Cube</a> *</p> <p>NRICH: <a href="#">Inky Cube</a> ***</p> <p>NRICH: <a href="#">Triple Cubes</a> *</p> <p>NRICH: <a href="#">Sponge Sections</a> **</p> <p>NRICH: <a href="#">A Puzzling Cube</a> *</p>