

## Federation of Yatton Schools : Year 2 Medium Term Planning Autumn 1

Date	Area of Study	Curriculum Objective	Non-Statutory Guidance	What will core learning look like?
	Number and place value: counting, reading and writing 2-digit numbers, place value	<ul style="list-style-type: none"> <li>● To count in steps of 2, 3, and 5 from 0, and count in tens from any number, forward or backward.</li> <li>● To recognise the place value of each digit in a two-digit number (tens, ones).</li> <li>● To identify, represent and estimate numbers using different representations, including the number line.</li> <li>● To compare and order numbers from 0 up to 100; use &lt;, &gt; and = signs.</li> <li>● To read and write numbers to at least 100 in numerals and in words.</li> <li>● To use place value and number facts to solve problems.</li> </ul>	<p>Using materials and a range of representations, pupils practise counting, reading, writing and comparing numbers to at least 100 and solving a variety of related problems to develop fluency. They count in multiples of three to support their later understanding of a third.</p> <p>As they become more confident with numbers up to 100, pupils are introduced to larger numbers to develop further their recognition of patterns within the number system and represent them in different ways, including spatial representations.</p> <p>Pupils should partition numbers in different ways (for example, <math>23 = 20 + 3</math> and <math>23 = 10 + 13</math>) to support subtraction. 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. They begin to understand zero as a place holder.</p>	
	Addition: concrete, visual and number facts	<ul style="list-style-type: none"> <li>● To solve problems with addition and subtraction:               <ul style="list-style-type: none"> <li>• Using concrete objects and pictorial representations, including those involving numbers, quantities and measures</li> <li>• Applying their increasing knowledge of mental and written methods.</li> </ul> </li> <li>● To recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.</li> <li>● To add and subtract using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers.</li> <li>● To show that addition can be done in any order (commutative) and subtraction cannot.</li> <li>● To recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.</li> </ul>	<p>Pupils extend their understanding of the language of addition and subtraction to include sum and difference.</p> <p>Pupils practise addition and subtraction to 20 to become increasingly fluent in deriving facts such as using <math>3 + 7 = 10</math>; <math>10 - 7 = 3</math> and <math>7 = 10 - 3</math> to calculate <math>30 + 70 = 100</math>; <math>100 - 70 = 30</math> and <math>70 = 100 - 30</math>. They check their calculations, including by adding to check subtraction and adding numbers in a different order to check addition (for example, <math>5 + 2 + 1 = 1 + 5 + 2 = 1 + 2 + 5</math>). This establishes commutativity and associativity of addition.</p> <p>Recording addition and subtraction in columns supports place value and prepares for formal written methods with larger numbers.</p>	
	Subtraction: concrete, visual and number facts	<ul style="list-style-type: none"> <li>● To recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.</li> <li>● To add and subtract using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers.</li> <li>● To show that addition can be done in any order (commutative) and subtraction cannot.</li> <li>● To recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.</li> </ul>	<p>Pupils use a variety of language to describe multiplication and division.</p> <p>Pupils are introduced to the multiplication tables. They practise to become fluent in the 2, 5 and 10 multiplication tables and connect them to each other. They connect the 10 multiplication table to place value, and the 5 multiplication</p>	
	Multiplication and division: repeated addition and	<ul style="list-style-type: none"> <li>● To recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.</li> <li>● To calculate mathematical statements for multiplication and division within the multiplication tables and write</li> </ul>	<p>Pupils use a variety of language to describe multiplication and division.</p> <p>Pupils are introduced to the multiplication tables. They practise to become fluent in the 2, 5 and 10 multiplication tables and connect them to each other. They connect the 10 multiplication table to place value, and the 5 multiplication</p>	

	repeated subtraction	<p>them using multiplication, division and equals signs.</p> <ul style="list-style-type: none"> <li>● To recognise and use the inverse relationship between multiplication and division in calculations.</li> <li>● To show that multiplication of two numbers can be done in any order (commutative) and division for one number by another cannot.</li> <li>● To solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts.</li> </ul>	<p>table to the divisions on the clock face. They begin to use other multiplication tables and recall multiplication facts, including using related division facts to perform written and mental calculations.</p> <p>Pupils work with a range of materials and contexts in which multiplication and division relate to grouping and sharing discrete and continuous quantities, to arrays and to repeated addition. They begin to relate these to fractions and measures (for example, <math>40 \div 2 = 20</math>, 20 is a half of 40). They use commutativity and inverse relations to develop multiplicative reasoning (for example, <math>4 \times 5 = 20</math> and <math>20 \div 5 = 4</math>).</p>	
	Geometry: properties of 3D and 2D shape	<ul style="list-style-type: none"> <li>● To identify and describe the properties of 2D shapes, including the number of sides and symmetry in a vertical line.</li> <li>● To identify and describe the properties of 3D shapes including the number of edges, vertices and faces.</li> <li>● To identify 2D shapes on the surface of 3D shapes, for example circle on a cylinder and a triangle on a pyramid.</li> <li>● To compare and sort common 2D and 3D shapes and everyday objects.</li> </ul>	<p>Pupils handle and name a wide variety of common 2-D and 3-D 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.</p> <p>Pupils read and write names for shapes that are appropriate for their word reading and spelling.</p> <p>Pupils draw lines and shapes using a straight edge.</p>	
	Measures: length, mass, capacity	<ul style="list-style-type: none"> <li>● To choose and use appropriate standard units to estimate and measure length/ height in any direction; mass; temperature; volume and capacity to the nearest appropriate unit using rulers, scales, thermometers and measuring vessels.</li> <li>● To compare and order lengths, mass, volume/capacity and record the results using <math>&gt;</math>, <math>&lt;</math> and <math>=</math>.</li> </ul>	<p>Pupils use standard units of measurement with increasing accuracy, using their knowledge of the number system. They use the appropriate language and record using standard abbreviations.</p> <p>Comparing measures includes simple multiples such as 'half as high'; 'twice as wide'.</p> <p>They become fluent in telling the time on analogue clocks and recording it.</p>	
	Measures: Money	<ul style="list-style-type: none"> <li>● To recognise and use the symbols for pounds and pence; combine amounts to make a particular value</li> <li>● To find different combinations of coins that equal the same amounts of money</li> </ul> <p>To solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change</p>	<p>Pupils become fluent in counting and recognising coins. They read and say amounts of money confidently and use the symbols £ and p accurately, recording pounds and pence separately.</p>	
To assess the half-term's work				

