

## Federation of Yatton Schools : Year 4 Medium Term Planning Autumn 2

Date	Area of Study	Curriculum Objective	Non-Statutory Guidance	What will core learning look like?
	Mental Addition and subtraction	<ul style="list-style-type: none"> <li>● To add and subtract numbers with up to four digits using the efficient written methods of columnar addition and subtraction where appropriate.</li> <li>● To solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</li> </ul>	<p>Pupils continue to practise both mental methods and columnar addition and subtraction with increasingly large numbers to aid fluency (see <a href="#">Mathematics Appendix 1</a>).</p> <p>See Federation of Yatton Schools Calculation Policy</p>	
	Multiplication	<ul style="list-style-type: none"> <li>● To recall multiplication facts for multiplication tables up to <math>12 \times 12</math>.</li> <li>● To use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers.</li> <li>● To solve problems involving multiplying and adding, including using the distributive law and harder multiplication problems such as which <math>n</math> objects are connected to <math>m</math> objects.</li> </ul>	<p>Pupils continue to practise recalling and using multiplication tables and related division facts to aid fluency.</p> <p>Pupils practise mental methods and extend this to three-digit numbers to derive facts, (for example <math>600 \div 3 = 200</math> can be derived from <math>2 \times 3 = 6</math>).</p> <p>Pupils practise to become fluent in the formal written method of short multiplication and short division with exact answers (see <a href="#">Mathematics Appendix 1</a>).</p> <p>Pupils write statements about the equality of expressions (for example, use the distributive law <math>39 \times 7 = 30 \times 7 + 9 \times 7</math> and associative law <math>(2 \times 3) \times 4 = 2 \times (3 \times 4)</math>). They combine their knowledge of number facts and rules of arithmetic to solve mental and written calculations for example, <math>2 \times 6 \times 5 = 10 \times 6 = 60</math>.</p>	
	Multiplication and division	<ul style="list-style-type: none"> <li>● To recall multiplication facts for multiplication tables up to <math>12 \times 12</math>.</li> <li>● To use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers.</li> <li>● To solve problems involving multiplying and adding, including using the distributive law and harder multiplication problems such as which <math>n</math> objects are connected to <math>m</math> objects</li> </ul>	<p>Pupils solve two-step problems in contexts, choosing the appropriate operation, working with increasingly harder numbers. This should include correspondence questions such as the numbers of choices of a meal on a menu, or three cakes shared equally between 10 children.</p>	
	Fractions	<ul style="list-style-type: none"> <li>● To count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten.</li> <li>● To solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number.</li> <li>● To recognise and show, using diagrams, families of</li> </ul>	<p>Pupils should connect hundredths to tenths and place value and decimal measure.</p> <p>They extend the use of the number line to connect fractions, numbers and measures.</p> <p>Pupils understand the relation between non-unit fractions and multiplication and division of quantities, with particular emphasis on tenths and hundredths.</p> <p>Pupils make connections between fractions of a length, of a shape and as a representation of one whole or set of</p>	

		<p>common equivalent fractions.</p>	<p>quantities. Pupils use factors and multiples to recognise equivalent fractions and simplify where appropriate (for example, <math>6/9 = 2/3</math> and <math>1/4 = 2/8</math> .</p> <p>Pupils continue to practise adding and subtracting fractions with the same denominator, to become fluent through a variety of increasingly complex problems beyond one whole.</p> <p>Pupils are taught throughout that decimals and fractions are different ways of expressing numbers and proportions.</p> <p>Pupils' understanding of the number system and decimal place value is extended at this stage to tenths and then hundredths. This includes relating the decimal notation to division of whole number by 10 and later 100.</p> <p>They practise counting using simple fractions and decimals, both forwards and backwards.</p> <p>Pupils learn decimal notation and the language associated with it, including in the context of measurements. They make comparisons and order decimal amounts and quantities that are expressed to the same number of decimal places. They should be able to represent numbers with one or two decimal places in several ways, such as on number lines.</p>	
	<p><b>Geometry:</b>  <b>Properties of Shape and Position and direction</b></p>	<ul style="list-style-type: none"> <li>● To describe positions on a 2D grid as coordinates in the first quadrant.</li> <li>● To plot specified points and draw sides to complete a given polygon.</li> <li>● To compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.</li> <li>● To identify acute and obtuse angles and compare and order angles up to two right angles by size.</li> </ul>	<p>Pupils continue to classify shapes using geometrical properties, extending to classifying different triangles (for example, isosceles, equilateral, scalene) and quadrilaterals (for example, parallelogram, rhombus, trapezium).</p> <p>Pupils compare and order angles in preparation for using a protractor and compare lengths and angles to decide if a polygon is regular or irregular.</p> <p>Pupils draw symmetric patterns using a variety of media to become familiar with different orientations of lines of symmetry; and recognise line symmetry in a variety of diagrams, including where the line of symmetry does not dissect the original shape.</p> <p>Pupils draw a pair of axes in one quadrant, with equal scales and integer labels. They read, write and use pairs of coordinates, for example (2, 5), including using coordinate-plotting ICT tools.</p>	

	Measures: Time	<ul style="list-style-type: none"> <li>● To read, write and convert time between analogue and digital 12- and 24-hour clocks.</li> <li>● To solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.</li> </ul>		
	Statistics:	<ul style="list-style-type: none"> <li>● To interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.</li> <li>● To solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and simple line graphs.</li> </ul>	<p>Pupils understand and use a greater range of scales in their representations.</p> <p>Pupils begin to relate the graphical representation of data to recording change over time.</p>	
To assess the half-term's work				