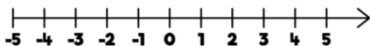






WRPS Maths Medium Term Planning: Spring Term Year 4 Year 5

Week.	Mathematical aspect	Non-negotiable end points Year 4.	Non-negotiable end points Year 5	Curriculum statements – Year 4.	Curriculum Statements. Year 5.																																	
1. Spring 1	Number and place value: positive and negative numbers, comparing, ordering and rounding	Knows the number system from zero into negative numbers. Knows a variety of representations and is fluent in the order and place value of numbers beyond 1000, including counting in tens and hundreds. Knows how to maintain fluency in other multiples.	Knows how to read and interpret negative numbers and find differences between negative and positive numbers.	<ul style="list-style-type: none">● To count backwards through zero to include negative numbers.● To recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones).● To identify, represent and estimate numbers using different representations.● To order and compare numbers beyond 1000.● To round any number to the nearest 10, 100 or 1000.● To count in multiples of 6, 7, 9, 25, 1000.● To find 1000 more or less than a given number.	<ul style="list-style-type: none">● To interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers through zero.● To round any number up to 1,000,000 to the nearest 10, 100, 1000, 10,000 and 100,000.● To solve number problems and practical problems that involve all of the above.																																	
Links to resources and policy documents:				<p>Use the number line to answer the questions.</p> <p></p> <ul style="list-style-type: none">• What is 6 less than 4?• What is 5 more than −2?• What is the difference between 3 and −3? <p>Here are the temperatures in four cities at midnight and at midday.</p> <table border="1"><thead><tr><th rowspan="2">City</th><th colspan="2">Temperature</th></tr><tr><th>At midnight</th><th>At midday</th></tr></thead><tbody><tr><td>Paris</td><td>−4°C</td><td>−2°C</td></tr><tr><td>Oslo</td><td>−13°C</td><td>−7°C</td></tr><tr><td>Rome</td><td>3°C</td><td>10°C</td></tr><tr><td>Warsaw</td><td>−6°C</td><td>2°C</td></tr></tbody></table> <p>At midnight, how many degrees colder was Paris than Rome?</p> <p><input type="text"/> degrees</p> <p>Which city was 6 degrees colder at midnight than at midday?</p> <p><input type="text"/></p>	City	Temperature		At midnight	At midday	Paris	−4°C	−2°C	Oslo	−13°C	−7°C	Rome	3°C	10°C	Warsaw	−6°C	2°C	<p></p> <table border="1"><tbody><tr><td>Which place has the coldest temperature?</td><td></td></tr><tr><td>Which place has the warmest temperature?</td><td></td></tr><tr><td>What is the difference in the temperatures in Stockholm and Rome?</td><td>°C</td></tr><tr><td>What is the difference in the temperatures in Dublin and Copenhagen?</td><td>°C</td></tr><tr><td>The temperature in Paris decreases by 5°C. What is the new temperature?</td><td>°C</td></tr><tr><td>The temperature in London increases by 6°C. What is the new temperature?</td><td>°C</td></tr><tr><td>The temperature in Oslo increases by 4°C. What is the new temperature?</td><td>°C</td></tr><tr><td>The temperature in Berlin decreases by 3°C. What is the new temperature?</td><td>°C</td></tr></tbody></table> <p>In the daytime, the temperature reached a maximum of 8°C in Suzie's garden. At night it fell to -4°C. By how many degrees did the temperature fall?</p> <p><input type="text"/></p>	Which place has the coldest temperature?		Which place has the warmest temperature?		What is the difference in the temperatures in Stockholm and Rome?	°C	What is the difference in the temperatures in Dublin and Copenhagen?	°C	The temperature in Paris decreases by 5°C. What is the new temperature?	°C	The temperature in London increases by 6°C. What is the new temperature?	°C	The temperature in Oslo increases by 4°C. What is the new temperature?	°C	The temperature in Berlin decreases by 3°C. What is the new temperature?	°C
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2.	Addition and subtraction: Estimations and accuracy written methods	Knows how to check the accuracy of addition and subtraction calculations	Knows the formal written methods of columnar addition and subtraction with increasingly large numbers and decimals.	<ul style="list-style-type: none">● To add and subtract numbers with up to four digits using the efficient written methods of columnar addition and subtraction where appropriate.● To estimate and use inverse operations to check answers to a calculation.● To solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.● To estimate, compare and calculate different measures, including money in pounds and pence.	<ul style="list-style-type: none">● To add and subtract whole numbers with more than 4 digits, including using efficient written methods (columnar addition and subtraction).● To solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.● To use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.● To solve problems involving numbers up to three decimal places.																																	
Links to resources and policy documents:				<p>Starting with the number below, complete the calculations.</p> <p></p> <ul style="list-style-type: none">• Add 3,000• Subtract 50• Add 200 <p>What is the final answer?</p> <p><input type="text"/></p>	<p>Calculate 718 482 + 443 628 + 53 672.</p> <p>Use rounding to the nearest ten thousand to find an estimated answer to: 56 831 + 48 832 + 31 742 + 83 184</p> <p><input type="text"/></p>																																	



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	<div><div><div><div><div>1</div><div>7</div><div>3</div><div>4</div><div>3</div></div><div><div>+</div><div>4</div><div>5</div><div>8</div><div>6</div></div><div><div>2</div><div>1</div><div>9</div><div>2</div><div>9</div></div></div></div><div>Ensure pupils understand why and how to line up the decimal point when some numbers begin in a different column.</div><div><div><div>0</div><div>9</div><div>1</div><div>3</div><div>1</div><div></div><div></div></div><div><div>1</div><div>0</div><div>5</div><div>4</div><div>1</div><div>9</div><div>kg</div></div><div><div>-</div><div>3</div><div>6</div><div>0</div><div>8</div><div>0</div><div>kg</div></div><div><div>6</div><div>9</div><div>3</div><div>3</div><div>9</div><div>kg</div></div></div><div>Add a zero to empty decimal places to aid understanding of place value.</div></div> <div>Work out the missing numbers.</div> <div><div><div><div>?</div><div>4</div><div>?</div><div>3</div><div>?</div></div><div><div>+</div><div>2</div><div>?</div><div>5</div><div>?</div><div>2</div></div><div><div>7</div><div>8</div><div>5</div><div>2</div><div>9</div></div></div></div>			<div><div><div>3426</div><div>+1715</div><div><div>5141</div><div>1 1</div></div></div><div>The exchanged digits should be carried below the sum and crossed through when they have been added</div></div> <div>947 - 198 is best completed by taking away 200, then adjusting rather than a formal calculation.</div> <div><div>5362 - 1436 = 3926</div><div><div>+64</div><div>+500</div><div>+3362</div></div><div>1436 1500 2000 5362</div></div> <div>Write down the four relationships you can see in the bar model.</div> <div><div><div>2300</div><div>1240</div><div>3540</div></div><div><div><div></div><div>+</div><div></div><div>=</div><div></div></div><div><div><div></div><div>+</div><div></div><div>=</div><div></div></div><div><div><div></div><div>-</div><div></div><div>=</div><div></div></div><div><div><div></div><div>-</div><div></div><div>=</div><div></div></div></div></div></div></div></div>	<div><div><div>3&4.</div><div>Multiplication and division: square and cube numbers written methods</div><div>Knows and applies table facts for recall of multiplication and division facts when calculating.</div><div>Knows the definition of square and cube numbers and the correct notation. Knows compact notation for long multiplication. Knows the compact algorithm for short division including remainders.</div></div></div>	<div><div>Links to resources and policy documents: Square numbers A square number is a number multiplied by itself. This can also be called 'a number squared'. The symbol for squared is ². Cube numbers A cube number is a number multiplied by itself 3 times. This can also be called 'a number cubed'.The symbol for cubed is ³.</div><div><div>Make the target number of 84 using three of the digits below.</div><div><div>7</div><div>5</div><div>3</div><div>4</div><div>6</div><div>2</div></div><div><div><div></div><div>×</div><div></div><div>×</div><div></div><div>= 84</div></div></div></div></div>	<div><div>Fill in the multiplication and division tables by working out the missing digits.</div><div><div><div><div>×</div><div>8</div><div>9</div></div><div><div>12</div><div>24</div><div></div><div></div></div><div><div>3</div><div></div><div></div><div>12</div></div><div><div></div><div>14</div><div></div><div></div></div><div><div></div><div></div><div>54</div><div></div></div></div><div><div><div>×</div><div>7</div><div>6</div></div><div><div></div><div>20</div><div>16</div><div>14</div></div><div><div>5</div><div></div><div>40</div><div></div></div><div><div></div><div></div><div></div><div>36</div></div><div><div>3</div><div>30</div><div></div><div></div></div></div></div><div><div>35 x 6 = 30 x 6 + 5 x 6</div><div>= 180 + 30</div><div>= 210</div></div></div>	<div><div>Circle the square numbers.</div><div><div>1</div><div>49</div><div>66</div><div>17</div><div>36</div><div>9</div><div>144</div><div>75</div><div>101</div><div>81</div><div>46</div><div>12</div><div>64</div><div>100</div><div>25</div><div>4</div><div>123</div><div>121</div></div></div> <div><div>Work out:</div><div>6²=.</div><div>3³=</div><div>4 squared =</div><div>8 cubed =</div></div>



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	Write the following as a number sentence and then solve them: 1) $2^2 =$ 2) $4^2 =$ 3) $5^2 =$ 4) $10^2 =$	Jess says, "7 ² is 14." Do you agree? Explain your thinking.		<div>To multiply by 4: Double and then double again.</div> <div>To multiply by 5: Multiply by 10 and then halve.</div> <div>To multiply by 20: Multiply by 10 and then double.</div> <div>To multiply by 9: Multiply by 10 and then adjust.</div> <div>To multiply by 6: Multiply by 3 and then double.</div> <div>Standard Algorithm for Multiplication $\begin{array}{r} 34 \\ \times 28 \\ \hline 272 \\ + 680 \\ \hline 952 \end{array}$</div> <div>$186 \div 6 =$ $\begin{array}{r} 0 \ 3 \ 1 \\ 6 \overline{) 1 \ 8 \ 6} \\ \underline{6 } \\ 1 \ 8 \\ \underline{18} \\ 0 \end{array}$<div>no groups of 6 can be made</div><div>$1 \times 6 = 6$</div><div>$3 \times 6 = 18$</div></div>	$5309 \div 8$ $\begin{array}{r} 0 \ 6 \ 6 \ 3 \ r \ 5 \\ 8 \overline{) 5309} \\ \underline{40 } \\ 13 \\ \underline{9 } \\ 40 \\ \underline{32 } \\ 80 \\ \underline{72 } \\ 80 \\ \underline{72 } \\ 8 \end{array}$ <div>The remainder could be expressed as five eighths, $\frac{5}{8}$, as a decimal number, or rounded up or down as appropriate for the problem.</div> <table><tr><td></td><td></td><td>2</td><td>1</td><td>9</td><td>0</td></tr><tr><td>x</td><td></td><td></td><td></td><td>6</td><td>9</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>			2	1	9	0	x				6	9																		
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5.	Measurement: Area and perimeter	Knows how to calculate the perimeter as the measurement of the boundary of a rectilinear figure. Knows the area is the measurement of the surface of a rectilinear figure.	Knows how to calculate the perimeter of rectangles and related composite shapes, including using the relations of perimeter or area to find unknown lengths.	<ul style="list-style-type: none">•To measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres•To find the area of rectilinear shapes by counting squares.	<ul style="list-style-type: none">• To measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres.• To calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes.																														
Links to resources and policy documents:				Calculate the perimeter of the shapes. Jack uses his times-tables to count the squares more efficiently. There are 4 squares in 1 row. There are 3 rows altogether. 3 rows of 4 squares = 12 squares Use Jack's method to find the area of this rectangle. 	Find the perimeter of the shapes. Calculate the area. 																														



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6.	Geometry; Describing and classifying shapes including angles	Knows how to identify acute and obtuse angles. Knows that two right angles form a straight line.	Knows that angles are measured using a protractor. Knows right, acute, obtuse, straight and reflex angles.	<ul style="list-style-type: none">● To compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.● To identify lines of symmetry in 2D shapes presented in different orientations.● To complete a simple symmetric figure with respect to a specific line of symmetry.● To identify acute and obtuse angles and compare and order angles up to two right angles by size.	<ul style="list-style-type: none">● To know angles are measured in degrees; estimate and compare acute, obtuse and reflex angles● To draw given angles and measure them in degrees (°). To identify:<ul style="list-style-type: none">● angles at a point and one whole turn (total 360°)● angles at a point on a straight line and 1/2 a turn (total 180°)● other multiples of 90°.
<p>Links to resources and policy documents:</p> <p>A right angle is ____ degrees. Acute angles are ____ than a right angle. Obtuse angles are ____ than a right angle.</p> <div><div><div><div>1</div><div>2</div><div>3</div><div>4</div><div>5</div></div><div><div>6</div><div>7</div><div>8</div><div>9</div><div>10</div></div></div><div><p>What is the name of the shape?</p><p>What kind of shape is it and what are the properties of the shape?</p><ul style="list-style-type: none">• Is it a polygon?• Is it a regular or irregular polygon?• Are all the sides of equal length and are all the angles equal?• How many sides are there?• Are there any parallel sides..... how many pairs of parallel sides?• Are there any perpendicular sides.....how many?• Are there any right angles..... how many?• (With triangles) Are there any obtuse or acute angles?• Are there any lines of symmetry..... how many?</div></div> <td><p>Describe the angles as acute, obtuse or right angle.</p></td> <td><p>Label the angles. O for obtuse, A for acute and R for right angle.</p><p>Calculate the missing angles.</p></td>				<p>Describe the angles as acute, obtuse or right angle.</p>	<p>Label the angles. O for obtuse, A for acute and R for right angle.</p> <p>Calculate the missing angles.</p>
7.	Statistics: Solve problems from data Reading line graphs	Knows how to interpret and analyse graphs and charts to solve problems.	Knows which representations of data are most appropriate and why using a line graph.	<ul style="list-style-type: none">● To interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.● To solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and simple line graphs.	<ul style="list-style-type: none">● To solve comparison, sum and difference problems using information presented in a line graph.● To identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers● To solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes;

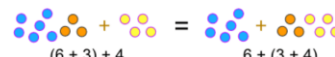
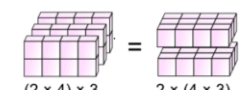


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<p>Links to resources and policy documents:</p> <p>The table shows average rainfall in Leicester over a year. Complete the graph using the information from the table.</p> <div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></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WRPS Maths Medium Term Planning: Spring Term Year 4 Year 5

Week.	Mathematical aspect	Non-negotiable end points Year 4.	Non-negotiable end points Year 5	Curriculum statements – Year 4.	Curriculum Statements. Year 5.
<p>The "Associative Laws" say that it doesn't matter how we group the numbers (i.e. which we calculate first) ...</p> <p>... when we add:</p> <p>$(a + b) + c = a + (b + c)$</p> <p></p> <p>$(6 + 3) + 4 = 6 + (3 + 4)$</p> <p>... or when we multiply:</p> <p>$(a \times b) \times c = a \times (b \times c)$</p> <p></p> <p>$(2 \times 4) \times 3 = 2 \times (4 \times 3)$</p>					<p>Square numbers</p> <p>A square number is a number multiplied by itself. This can also be called 'a number squared'. The symbol for squared is ².</p> <p>Cube numbers</p> <p>A cube number is a number multiplied by itself 3 times. This can also be called 'a number cubed'.The symbol for cubed is ³.</p>
9.	Fractions; Decimals	Knows how to write decimal equivalents of any number of tenths and hundredths	Knows decimal notation and the language associated with it for up to three decimal places.	<ul style="list-style-type: none">● To recognise and write decimal equivalents of any number of tenths or hundredths.● To find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as units, tenths and hundredths.● To round decimals with one decimal place to the nearest whole number.● To compare numbers with the same number of decimal places up to two decimal places.	<ul style="list-style-type: none">● To read, write, order and compare numbers with up to three decimal places.● To round decimals with two decimal places to the nearest whole numbers and to one decimal place.● To recognise and use thousandths and relate them to tenths, hundredths and decimals equivalents.● To solve problems involving number up to three decimal places.
Links to resources and policy documents:				<p>Place the numbers in ascending order on the number line.</p> <div><div>3.115</div><div>$3\frac{113}{1000}$</div><div>Three and 11 hundredths</div></div> <p>3.11 3.12</p> <p>Use the number lines to round 3.24 to the nearest tenth and the nearest whole number.</p> <p>3.2 3.25 3.3 3 3.5 4</p> <p>Change 0.639 into three fractions.</p> <p>0.639 = <div><div></div><div>1000</div></div> + <div><div></div><div>100</div></div> + <div><div></div><div>10</div></div></p>	



WRPS Maths Medium Term Planning: Spring Term Year 4 Year 5

Week.	Mathematical aspect	Non-negotiable end points Year 4.	Non-negotiable end points Year 5	Curriculum statements – Year 4.	Curriculum Statements. Year 5.
10 Spring 1	Fractions: calculating Solving problems	Knows how to add and subtract fractions with the same denominator.	Knows how to convert fractions to a common denominator for addition and subtraction.	<ul style="list-style-type: none">● 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.● To recognise and write decimal equivalents to $\frac{1}{4}, \frac{1}{2}, \frac{3}{4}$● To solve simple measure and money problems involving fractions and decimals to two decimal places.	<ul style="list-style-type: none">● To recognise mixed numbers and improper fractions and convert from one form to the other; write mathematical statements > 1 as a mixed number.● To add and subtract fractions with the same denominator and multiples of the same number
<div>Links to resources and policy documents:</div> <div><div><p>Use the counters and bar models to calculate the whole:</p><div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div>There are ____ counters in one part.</div><div>$\frac{1}{4} = \frac{\quad}{\quad}$ $\frac{2}{4} = \frac{\quad}{\quad}$ $\frac{3}{4} = \frac{\quad}{\quad}$ $\frac{4}{4}$ or 1 whole = ____</div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div>There are 7 counters in one part.</div><div>$\frac{1}{4} = \frac{\quad}{\quad}$ $\frac{2}{4} = \frac{\quad}{\quad}$ $\frac{3}{4} = \frac{\quad}{\quad}$ $\frac{4}{4}$ or 1 whole = ____</div></div><div><p>Equivalent fractions</p><p>However, sometimes the denominators are different.</p><p>You use equivalent fractions to make them the same.</p><p>A common multiple of 2 and 3 is 6.</p><p>So, for each fraction we need an equivalent fraction with a denominator of 6.</p><p>Now you can add these together.</p></div><div>$\frac{1}{2} + \frac{1}{3} = ?$$\frac{1 \times 3}{2 \times 3} = \frac{3}{6} \quad \frac{1 \times 2}{3 \times 2} = \frac{2}{6}$$\frac{3}{6} + \frac{2}{6} = \frac{5}{6}$</div></div><div><p>Write three fraction equations for this model.</p><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div>Answer</div><div>$\frac{3}{8} + \frac{4}{8} =$</div><div>$\frac{5}{7} - \frac{2}{7} =$</div><div>True or false?</div><div>$\frac{5}{6} + \frac{2}{6} = \frac{7}{12}$</div><div>$\frac{13}{20} - \frac{3}{20} = \frac{1}{2}$</div></div></div><div><p>Tommy converts the improper fraction $\frac{27}{8}$ into a mixed number using bar models.</p><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div>$\frac{27}{8}$</div><div>$3 \frac{3}{8}$</div><p>Use Tommy's method to convert $\frac{25}{8}, \frac{27}{6}, \frac{18}{7}$ and $\frac{32}{4}$</p><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div>$\frac{25}{8}$</div><div>$\frac{27}{6}$</div><div>$\frac{18}{7}$</div><div>$\frac{32}{4}$</div><div>$=$</div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div>1</div><div>1</div><div>1</div><div>$\frac{\quad}{\quad}$</div><div>$\frac{\quad}{\quad}$</div></div><p>Farmer Staneff owns a field.</p><p>He plants carrots on $\frac{1}{3}$ of the field.</p><p>He plants potatoes on $\frac{2}{9}$ of the field.</p><p>He plants onions on $\frac{5}{18}$ of the field.</p><p>What fraction of the field is covered altogether?</p></div></div></div></div>					
11.	Addition and subtraction: written methods including money in pounds and pence.	Knows how to add and subtract using standard written algorithms including in the context of money.	Knows and applies the formal written methods of columnar addition and subtraction within the context of money.	<ul style="list-style-type: none">● To add and subtract numbers with up to four digits using the efficient written methods of columnar addition and subtraction where appropriate.● To estimate and use inverse operations to check answers to a calculation.● To solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.	<ul style="list-style-type: none">● To add and subtract whole numbers with more than 4 digits, including using efficient written methods (columnar addition and subtraction).● To solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.● To use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.



WRPS Maths Medium Term Planning: Spring Term Year 4 Year 5

Week.	Mathematical aspect	Non-negotiable end points Year 4.	Non-negotiable end points Year 5	Curriculum statements – Year 4.	Curriculum Statements. Year 5.												
<div>Links to resources and policy documents:</div> <div><div>£3.22 £3.22 £8.93</div><div><div>+£5.71</div><div>+£5.71</div><div>-£5.71</div></div><div>£8.93 £8.93 £3.22</div></div>				<div><table><tr><th colspan="3">Price list</th></tr><tr><td>footballs</td><td></td><td>£4.40 each</td></tr><tr><td>tennis balls</td><td></td><td>£6.50 for 3</td></tr><tr><td>golf balls</td><td></td><td>£4.35 for 4</td></tr></table><div>I buy 8 golf balls, 12 tennis balls and 2 footballs. How much change will I get from £50?</div></div>	Price list			footballs		£4.40 each	tennis balls		£6.50 for 3	golf balls		£4.35 for 4	<div>Alisha has £18.35 in her purse. Her father gives her £5 pocket money. She buys a book for £7.99 and a bag for £13.49. How much will she have left?</div> <div>Write the amount £100 000 less than</div> <div>(a) £600 000 (b) £870 000 (c) 1 000 000 (d) £111 111</div>
Price list																	
footballs		£4.40 each															
tennis balls		£6.50 for 3															
golf balls		£4.35 for 4															
12.	Geometry: position and direction all four quadrants	Knows how to describe positions as translations using the correct terms.	Knows how to describe a translation or reflection of a shape, including reference to the axes in the first quadrant.	<ul style="list-style-type: none">● To describe positions on a 2D grid as coordinates in the first quadrant.● To describe movements between positions as translations of a given unit to the left/right and up/down.● To plot specified points and draw sides to complete a given polygon.	<ul style="list-style-type: none">● To identify, describe and represent the position of a shape following a reflection or translation using the appropriate language, and know that the shape has not changed.												
<div>Links to resources and policy documents:</div> <div><div>Describe the positions and translations of the 2D shapes:</div><div><div> Starting Coordinates: Translation: Finishing Coordinates:</div><div> Starting Coordinates: Translation: Finishing Coordinates:</div><div> Starting Coordinates: Translation: Finishing Coordinates:</div></div><div><div>Coordinates can use positive and negative numbers. Whether positive or negative, always write the x-axis coordinate followed by the y coordinate.</div><div>Look at the circle point. It is 3 squares along and 4 down. We write this coordinate as (3,-4).</div></div></div>				<div>Describe the translation from:</div> <div><div> to </div><div> to </div><div> to </div><div> to </div></div> <div></div>	<div>Write the coordinates for the points shown.</div> <div> (__ , __) (__ , __)</div> <div> (__ , __) (__ , __)</div> <div></div> <div>Plot two more points to create a square.</div> <div></div> <div>Translate A 6 right and 3 down. Record the coordinates before (__ , __) and after (__ , __) Translate B and C 4 left and 3 up. Record the coordinates before (__ , __) and after (__ , __)</div>												