

## Numeracy Medium Term Planning Year 4/5 2017 - 18

| Date / Week        | O/M Strand                              | O/M Objective  | Main Lesson Strand                      | Main Lesson Objective  | Problem Solving / Using and Applying Opportunity  |
|--------------------|---|--|---|--|---|
| Spring 1<br>week 1 | Number -<br>Place Value                 | <ul style="list-style-type: none"> <li>count backwards through zero to include negative numbers</li> </ul>   | Number -<br>Place Value                 | <ul style="list-style-type: none"> <li>recognise the place value of each digit in a six-digit number</li> <li>order and compare numbers beyond 1000</li> <li>round any number to the nearest 10, 100, 1000, 10,000 or 100,000</li> <li>Find the different between a positive and negative number.</li> </ul>   | <ul style="list-style-type: none"> <li>solve number and practical problems that involve all of the above and with increasingly large positive numbers</li> <li>solve number and practical problems with negative numbers</li> </ul>                   |
| Spring 1<br>week 2 | Geometry -<br>position and<br>direction | <ul style="list-style-type: none"> <li>describe positions on a 2-D grid as coordinates in the first quadrant</li> <li>describe movements between positions as translations of a given unit to the left/right and up/down</li> <li>plot specified points and draw sides to complete a given polygon.</li> </ul> | Geometry -<br>position and<br>direction | <ul style="list-style-type: none"> <li>describe positions on a 2-D grid as coordinates in the first quadrant</li> <li>describe movements between positions as translations of a given unit to the left/right and up/down</li> <li>plot specified points and draw sides to complete a given polygon.</li> </ul> | <ul style="list-style-type: none"> <li>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.</li> </ul> |

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| Spring 1<br>week 3 | Measurement                      | <ul style="list-style-type: none"> <li>Convert between different units of measure [for example, kilometre to metre; hour to minute]</li> </ul>  | Measurement  | <ul style="list-style-type: none"> <li>Measure and calculate perimeter in cm and m</li> <li>Calculate and compare area of rectangles</li> <li>Estimate the area of irregular shapes</li> </ul>  | <ul style="list-style-type: none"> <li>Working out the volume of shapes by making it with cm cubes</li> </ul>   |
| Spring 1<br>week 4 | Number                           | <ul style="list-style-type: none"> <li>Use place value to add / subtract near multiples of 100 / 1000</li> <li>Find the difference (give change) for different money amounts</li> </ul> | Number -<br>Addition and subtraction<br><br>(mental methods) | <ul style="list-style-type: none"> <li>Use counting up to subtract</li> <li>Subtract pairs of numbers with 1 decimal place</li> <li>estimate and use inverse operations to check answers to a calculation</li> </ul>  | <ul style="list-style-type: none"> <li>solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</li> </ul> |
| Spring 1<br>week 5 | Number -<br>addition of decimals | <ul style="list-style-type: none"> <li>round decimals to the nearest whole or tenth.</li> </ul>   | Number -<br>Place Value<br>(decimals)                        | <ul style="list-style-type: none"> <li>multiply and divide by 10, 100, 100 and say what each digit represents to 3 decimal places</li> <li>add pairs of 3 and 4 digit numbers with up to 3 decimal places, including those with different numbers of decimal places.</li> </ul> | <ul style="list-style-type: none"> <li>solve problems with a money context to 2 decimal places</li> </ul>   |

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|--------------------|--|---|----------------------------|--|---|
| Spring 2<br>week 1 | Number -<br>Multiplication<br>and division | <ul style="list-style-type: none"> <li>recall multiplication facts for multiplication tables up to <math>12 \times 12</math></li> </ul> | Number -<br>Multiplication | <ul style="list-style-type: none"> <li>multiply 3-digit and 4-digit numbers by a 2-digit number using formal written layout</li> </ul> | <ul style="list-style-type: none"> <li>solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.</li> </ul> |
| Spring 2<br>week 2 | Number -<br>Multiplication<br>and division | <ul style="list-style-type: none"> <li>recall division facts for multiplication tables up to <math>12 \times 12</math></li> </ul>       | Number -<br>Division       | <ul style="list-style-type: none"> <li>divide numbers using formal written layout</li> </ul>   | <ul style="list-style-type: none"> <li>solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.</li> </ul> |

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| Spring 2<br>week 3 | Measurement                             | <ul style="list-style-type: none"> <li>Convert between different units of measure [for example, kilometre to metre; hour to minute]</li> </ul>   | Measurement                             | <ul style="list-style-type: none"> <li>Convert between different units of measure [for example, kilometre to metre; hour to minute]</li> <li>estimate, compare and calculate different measures, including money in pounds and pence</li> <li>(Capacity)</li> </ul> | <ul style="list-style-type: none"> <li>Use measures in a practical context such as baking.</li> </ul>  |
| Spring 2<br>week 4 | Number -<br>Multiplication              | <ul style="list-style-type: none"> <li>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 ones, tenths and hundredths</li> </ul> | Measurement                             | <ul style="list-style-type: none"> <li>read, write and convert time between analogue and digital 12- and 24-hour clocks</li> </ul>  | <ul style="list-style-type: none"> <li>solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.</li> </ul>   |
| Spring 2<br>week 5 | Geometry -<br>position and<br>direction | <ul style="list-style-type: none"> <li>identify lines of symmetry in 2-D shapes presented in different orientations</li> </ul>   | Geometry -<br>position and<br>direction | <ul style="list-style-type: none"> <li>Draw given angles and measure them in degrees.</li> <li>Use properties of rectangles to deduce related and find missing lengths and angles.</li> <li></li> </ul>   | <ul style="list-style-type: none"> <li>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.</li> </ul> |

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|--------------------|-------------------|--|--------------------|---|---|
| Spring 2<br>week 6 | Number - decimals | <ul style="list-style-type: none"> <li>• Round decimals</li> <li>• Multiply / divide by 10, 100, 1000</li> </ul> | Measurement        | <ul style="list-style-type: none"> <li>• Find perimeter and area, using standard units, of rectangles</li> <li>• Estimate the area of irregular shapes</li> </ul> | <ul style="list-style-type: none"> <li>• Solve real life problems involving area and perimeter</li> </ul> |