

	Addition	Subtraction	Multiplication	Division																											
Yr 5	<p>Children should extend the carrying method to numbers with at least 4 digits.</p> $\begin{array}{r} 587 \\ + 475 \\ \hline 1062 \\ 11 \end{array}$ $\begin{array}{r} 3587 \\ + 675 \\ \hline 4262 \\ 111 \end{array}$ <p>Extend to add more than 2 numbers</p> $\begin{array}{r} 2345 \\ 1735 \\ + 721 \\ \hline 4701 \\ 11 \end{array}$ <p>Bar Model method</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td colspan="3" style="text-align: center;">4701</td> </tr> <tr> <td style="text-align: center;">2345</td> <td style="text-align: center;">1735</td> <td style="text-align: center;">721</td> </tr> </table>	4701			2345	1735	721	<p><b>Regrouping</b> Children who are exchanging answers should start with:</p> $\begin{array}{r} 754 \\ - 286 \\ \hline \end{array}$ <p>Step 1</p> $\begin{array}{r} 700 + 50 + 4 \\ - 200 \quad 80 + 6 \\ \hline \end{array}$ <p>Step 2</p> $\begin{array}{r} 700 + 40 + 14 \text{ (adjust from T to O)} \\ - 200 \quad 80 + 6 \\ \hline \end{array}$ <p>Step 3</p> $\begin{array}{r} 600 + 140 + 14 \text{ (adjust from H to T)} \\ - 200 \quad 80 + 6 \\ \hline 400 + 60 + 8 = 668 \end{array}$ <p>This would be recorded by the children as</p> $\begin{array}{r} 700 + 50 + 4 \\ - 600 + 60 + 8 = 668 \end{array}$ <p>Decomposition</p> $\begin{array}{r} 754 \\ - 286 \\ \hline 468 \end{array}$ <ul style="list-style-type: none"> <li>- Children should be able to subtract numbers with different numbers of digits,</li> <li>- Begin to find the difference between two decimal fractions with up to 3 digits and the same number of decimal places</li> <li>- Know that decimal points should line up under each other</li> </ul> <p>Where the numbers involved in the calculation are close together or near multiples of 10, 100 etc counting on using a number line should be used for a while.</p> <p>1209 - 388 = 821</p> $\begin{array}{r} 1209 \\ - 388 \\ \hline \end{array}$ <p>Bar model</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td colspan="2" style="text-align: center;">1209</td> </tr> <tr> <td style="text-align: center;">821</td> <td style="text-align: center;">388</td> </tr> </table>	1209		821	388	<p><b>Grid method</b></p> <p>Short multiplication - multiplication by a single digit 346 X 9 Children will approximate first</p> <p>346 X 9 is approximately 350 X 10 = 2500</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>X</td> <td>300</td> <td>40</td> <td>6</td> </tr> <tr> <td>9</td> <td>2700</td> <td>360</td> <td>54</td> </tr> </table> $\begin{array}{r} 2700 \\ 360 \\ + 54 \\ \hline 3114 \\ 11 \end{array}$ <p>TO X TO Long multiplication - multiplication by more than a single digit</p> <p>72 X 38 Children will approximate first 72 X 38 is approximately 70 X 40 = 2800</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>X</td> <td>70</td> <td>2</td> </tr> <tr> <td>30</td> <td>2100</td> <td>60</td> </tr> <tr> <td>8</td> <td>560</td> <td>16</td> </tr> </table> <p>Multiplying decimals - multiplying decimals to one decimal place by a single digit number</p> <p>Use the expanded column method 72 X 38</p> $\begin{array}{r} 72 \\ \times 38 \\ \hline 560 \\ 2100 \\ + 60 \\ \hline 2736 \end{array}$	X	300	40	6	9	2700	360	54	X	70	2	30	2100	60	8	560	16	<p>Children will continue to use written methods to solve short division HTO ÷ O</p> <p>196 ÷ 6</p> $\begin{array}{r} 32 \text{ r } 4 \\ 6 \overline{) 196} \\ - 12 \\ \hline 6 \\ - 6 \\ \hline 0 \end{array}$ <p>Answer: 32 remainder 4 or 32 r 4</p> <p>Use WIK sheet</p> <p>1 X 6 = 6 2 X 6 = 12 4 X 6 = 24 5 X 6 = 30 8 X 6 = 48 10 X 6 = 60</p> <p>Children should make sensible decisions about rounding up or down after division especially in the context of word problems.</p> <p>Move on to the short bus stop method.</p> <p>496 ÷ 11 becomes</p> $11 \overline{) 496} \begin{array}{l} 45 \text{ r } 1 \\ 495 \\ \hline 1 \end{array}$ <p>Answer: 45 <math>\frac{1}{11}</math></p> <p>Show remainders as an integer, as a fraction or as a decimal</p> <p>E.g. r 1 1/11 0.09</p>
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