

	Addition	Subtraction	Multiplication	Division																																
Yr 5	<p>Children should extend the carrying method to numbers with at least 4 digits.</p> $\begin{array}{r} 587 \\ + 475 \\ \hline 1062 \end{array}$ <p>Extend to add more than 2 numbers</p> $\begin{array}{r} 2345 \\ 1735 \\ + 721 \\ \hline 4701 \end{array}$ <p>Bar Model method</p> <table border="1"> <tr> <td>2345</td> <td>1735</td> <td>721</td> </tr> </table>	2345	1735	721	<p>Regrouping Children who are exchanging answers should start with:</p> $\begin{array}{r} 754 \\ - 286 \\ \hline \end{array}$ <p>Step 1 $\begin{array}{r} 700 \\ - 200 \\ \hline 50 \end{array}$ $\begin{array}{r} 50 \\ + 30 \\ \hline 80 \end{array}$ $\begin{array}{r} 4 \\ + 6 \\ \hline 10 \end{array}$ (adjust from T to O)</p> <p>Step 2 $\begin{array}{r} 700 \\ - 200 \\ \hline 500 \end{array}$ $\begin{array}{r} 40 \\ + 40 \\ \hline 80 \end{array}$ $\begin{array}{r} 14 \\ + 6 \\ \hline 20 \end{array}$ (adjust from H to T)</p> <p>Step 3 $\begin{array}{r} 600 \\ - 200 \\ \hline 400 \end{array}$ $\begin{array}{r} 140 \\ + 80 \\ \hline 220 \end{array}$ $\begin{array}{r} 6 \\ + 6 \\ \hline 12 \end{array}$ (adjust from H to T)</p> <p>This would be recorded by the children as</p> $\begin{array}{r} 700 \\ - 600 \\ \hline 100 \end{array} \quad \begin{array}{r} 50 \\ + 60 \\ \hline 110 \end{array} \quad \begin{array}{r} 4 \\ + 8 \\ \hline 12 \end{array} = 668$ <p>Decomposition</p> $\begin{array}{r} 754 \\ - 286 \\ \hline 468 \end{array}$ <ul style="list-style-type: none"> - Children should be able to subtract numbers with different numbers of digits, - Begin to find the difference between two decimal fractions with up to 3 digits and the same number of decimal places - Know that decimal points should line up under each other <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> $1209 - 388 = 821$ <p>Bar model</p> <table border="1"> <tr> <td>388</td> <td>400</td> <td>1200</td> <td>1209</td> </tr> <tr> <td>1209</td> <td></td> <td></td> <td>388</td> </tr> <tr> <td>821</td> <td></td> <td></td> <td></td> </tr> </table>	388	400	1200	1209	1209			388	821				<p>Short multiplication - multiplication by a single digit</p> 346×9 <p>Children will approximate first</p> <table border="1"> <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> <p>346 X 9 is approximately 350 X 10 = 2500</p> $\begin{array}{r} 2700 \\ + 360 \\ \hline 3114 \end{array}$ <p>+ $\frac{54}{11}$</p> <p>Use WIK sheet</p> $\begin{array}{r} 1 \times 6 = 6 \\ 2 \times 6 = 12 \\ 4 \times 6 = 24 \\ 5 \times 6 = 30 \\ 8 \times 6 = 48 \\ 10 \times 6 = 60 \end{array}$ <p>TO X TO</p> <p>Long multiplication - multiplication by more than a single digit</p> $\begin{array}{r} 72 \\ \times 38 \\ \hline \end{array}$ <p>Children will approximate first</p> $72 \times 38 \text{ is approximately } 70 \times 40 = 2800$ <table border="1"> <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</p> $\begin{array}{r} 72 \\ \times 38 \\ \hline 560 \\ 2100 \\ + 16 \\ \hline 2736 \end{array}$	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> $196 \div 6$ <p>32 r.4</p> $\begin{array}{r} 6 \\ \boxed{1} 96 \\ - 180 \\ \hline 16 \\ - 12 \\ \hline 4 \end{array}$ <p>Answer: 32 remainder 4 or 32 r.4</p> <p>1 X 6 = 6</p> <p>2 X 6 = 12</p> <p>4 X 6 = 24</p> <p>5 X 6 = 30</p> <p>8 X 6 = 48</p> <p>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> $\begin{array}{r} 4 \ 5 \ r1 \\ \boxed{1} \ 1 \ 4 \ 9^6 \ 6 \\ \text{Answer: } 45 \ \frac{1}{11} \end{array}$ <p>Show remainders as an integer, as a fraction or as a decimal</p> <p>E.g. r 1 $\frac{1}{11}$ 0.09</p>
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