
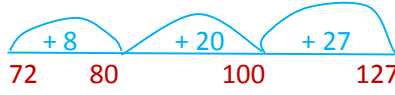


**DEVONSHIRE HILL PRIMARY SCHOOL – CALCULATION POLICY – YEAR 5**

Where needed and when introducing new concepts children will have access to a wide range of practical resources focusing on Numicon, number squares and vertical horizontal number lines to help them work out calculations and worded problems

ADDITION	SUBTRACTION	MULTIPLICATION	DIVISION
<p>Calculations with missing numbers need to be placed in all possible places.</p> <p><b>Partition</b> Either partition both numbers and recombine or partition the second number only. e.g.: <math>358 + 73 = 431</math></p> $\begin{array}{r} 300 + 50 + 8 \\ + \quad 70 + 3 \\ \hline 431 \end{array}$ <hr/> <p><b>Number line</b></p>  <p>358    +70    428    +3    431</p> <p><b>Extended column method or column method pg 46 Appendix 1</b> e.g.: <math>3587 + 675 = 4262</math></p> $\begin{array}{r} 3587 \\ + 675 \\ \hline 4262 \end{array}$	<p>Calculations with missing numbers need to be placed in all possible places.</p> <p><b>Partition</b> e.g.: <math>358 - 73</math></p> $\begin{array}{r} 300 + 50 + 8 \\ \quad 70 + 3 \\ \hline \end{array}$ <p><b>Number Line</b> e.g.: <math>127 - 72</math></p>  <p>72    80    100    127</p> <p><b>Column method</b> e.g.: <math>42.7 - 13.6 = 29.1</math></p> $\begin{array}{r} 3 \ 12 \\ 4 \ 2 \ . \ 7 \\ 1 \ 3 \ . \ 6 \\ \hline 2 \ 9 \ . \ 1 \end{array}$	<p>Children must be aware of how to combine table</p> <p><b>Partition</b> E.g.: <math>47 \times 6 = 282</math> <math>47 \times 6 = (40 \times 6) + (7 \times 6)</math> <math>= 240 + 42</math> <math>= 282</math></p> <p><b>Column Method</b> E.g.: <math>36 \times 42 = 1512</math></p> $\begin{array}{r} 36 \\ \times 42 \\ \hline 72 \\ 1440 \\ \hline 1512 \end{array}$ <p><b>Long Multiplication</b></p> $\begin{array}{r} 2 \\ 24 \\ \times 16 \\ \hline 144 \\ 240 \\ \hline 384 \end{array}$	<p>Quotients expressed as fractions or decimal fractions</p> <p><b>Chunking</b> e.g.: <math>256 \div 7 =</math></p> <p>Estimate <math>256 \div 7</math> lies between <math>210 \div 7 = 30</math> and <math>280 \div 7 = 40</math></p> $\begin{array}{r} 256 \\ -70 \quad (10 \times 7) \\ \hline 186 \quad (20 \times 7) \\ -140 \\ \hline 46 \quad (6 \times 7) \\ -42 \\ \hline 4 \end{array}$ <p><math>10 + 20 + 6 = 36</math> Short Division 14</p> $\begin{array}{r} 2 \\ 7 \overline{) 98} \\ \underline{14} \\ 8 \end{array}$ <p><b>Long Division</b> e.g.: <math>275 \div 8 = 34 \text{ R } 3</math></p> $\begin{array}{r} 34 \\ 8 \overline{) 275} \\ \underline{24} \\ 35 \\ \underline{32} \\ 3 \end{array}$

