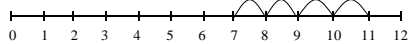
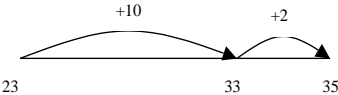
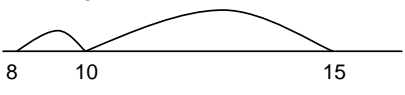
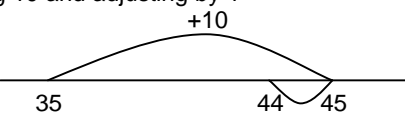
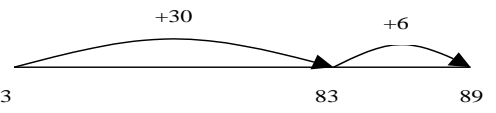
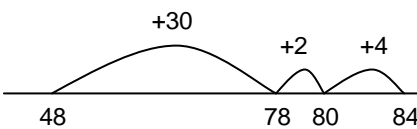


CARLTON JUNIOR AND INFANT SCHOOL CALCULATION POLICY - ADDITION GUIDELINES

Year One	Year Two	Year Three
<p><u>+ = signs and missing numbers</u></p> <p>Children need to understand the concept of equality before using the '=' sign. Calculations should be written either side of the equality sign so that the sign is not just interpreted as 'the answer'.</p> <p>2 = 1 + 1 2 + 3 = 4 + 1 3 = 3 2 + 2 + 2 = 4 + 2</p> <p>Missing numbers need to be placed in all possible places.</p> <p>3 + 4 = □ □ = 3 + 4 3 + □ = 7 7 = □ + 4 □ + 4 = 7 7 = 3 + □ □ + ▽ = 7 7 = □ + ▽</p> <p><u>The Number Line</u></p> <p>Children use a numbered line to count on in ones. Children use number lines and practical resources to support calculation and teachers <i>demonstrate</i> the use of the number line.</p> <p>7 + 4</p> 	<p><u>+ = signs and missing numbers</u></p> <p>Continue using a range of equations as in Year 1 but with appropriate, larger numbers. Extend to</p> <p>14 + 5 = 10 + □ and 32 + □ + □ = 100 35 = 1 + □ + 5</p> <p><u>Partition into tens and ones and recombine</u></p> <p>12 + 23 = 10 + 2 + 20 + 3 = 30 + 5 = 35</p> <p><u>Count on in tens and ones</u></p> <p>23 + 12 = 23 + 10 + 2 = 33 + 2 = 35</p>  <p><u>The Empty Number Line: Partitioning and bridging through 10.</u></p> <p>The steps in addition often bridge through a multiple of 10</p> <p>e.g.</p> <p>Children should be able to partition the 7 to relate adding the 2 and then the 5.</p> <p>8 + 7 = 15</p>  <p><u>Add 9 or 11 by adding 10 and adjusting by 1</u></p> <p>e.g.</p> <p>Add 9 by adding 10 and adjusting by 1</p> <p>35 + 9 = 44</p> 	<p><u>+ = signs and missing numbers</u></p> <p>Continue using a range of equations as in Year 1 and 2 but with appropriate, larger numbers.</p> <p><u>Partition into tens and ones</u></p> <ul style="list-style-type: none"> Partition both numbers and recombine. Count on by partitioning the second number only e.g. <p>36 + 53 = 53 + 30 + 6 = 83 + 6 = 89</p>  <p><u>Add a near multiple of 10 to a two-digit number</u></p> <p>Secure mental methods by using a number line to model the method. Continue as in Year 2 but with appropriate numbers</p> <p>e.g. 35 + 19 is the same as 35 + 20 - 1.</p> <p>Children need to be secure adding multiples of 10 to any two-digit number including those that are not multiples of 10.</p> <p>48 + 36 = 84</p>  <p><u>pencil and paper procedures</u></p> <p>83 + 42 = 125</p> <p><i>either</i></p> <p>1. Vertical expansion</p> $\begin{array}{r} 83 \\ + 42 \\ \hline 120 \\ 5 \\ \hline 125 \end{array}$ <p><i>or</i></p> <p>2. Horizontal expansion</p> $80 + 3 + 40 + 2 = 120 + 5 = 125$

