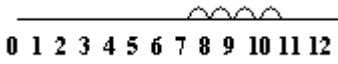
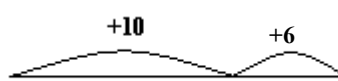
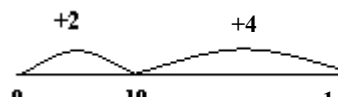
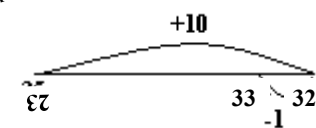
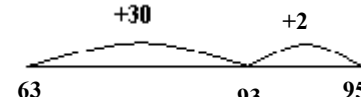
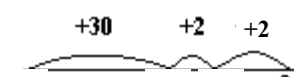


# Wilkinson Addition Policy

Year 1	Addition Year 2	Year 3
<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><math>2 = 1+1</math> <math>2+3=5</math></p> <p>Missing numbers need to be placed in all possible places.</p> <p><math>3+2=</math>                      <math>=3+2</math> <math>3+_=5</math>                      <math>5=+_2</math></p> <p><u>Activities</u> Children should use a wide range of counting equipment, everyday objects, as well as hoops, sorting trays, number tracks and numbered number lines.</p> <p><u>Teacher modelling</u> Drawing jumps on numbered number lines to help understanding of the mental method</p> <p><u>Children</u> To make their own jumps using rulers, fingers, pens bodies etc.</p> <p><math>7+4</math></p> 	<p><u>+ = signs and missing numbers</u> Continue using a range of equations as in year 1, but with appropriate large numbers. Extend to <math>14+3=10+_</math> And <math>36+_+_ =100</math></p> <p><u>Partition into tens and ones and recombine</u> <math>12+24=10+2+20+4</math> <math>=30+6</math> <math>=36</math></p> <p><u>Count on in tens and ones</u> <math>21+16=21+10+6</math> <math>=31+6</math> <math>=37</math></p>  <p><u>Partitioning and bridging through 10</u> The steps in addition often bridge through a multiple of 10 E.g. Children should be able to partition the 6 to relate adding 2 and then the 4. <math>8+6=14</math></p>  <p><u>Add 9 or 11 by adding 10 and adjusting by 1.</u> E.g. Add 9 by adding 10 and adjusting by 1 <math>23+9=32</math></p> 	<p><u>+ = signs and missing numbers</u> Continue as in Year 1 and 2 but with appropriate, larger numbers</p> <p><u>Partition into tens and ones.</u> Partition both numbers and recombine. Count on by partitioning the second number only. E.g. <math>32+63=63+30+2</math> <math>+93+2</math> <math>=95</math></p>  <p><u>Add a near multiple of 10 to a two digit number</u> Secure mental methods by using a number line to model the method. Continue as in year 2 but with appropriate numbers. E.g. <math>56+19</math> is the same as <math>56+20-1</math> Children need to be secure adding multiples of 10 to any two digit number including those that are not multiples of 10. <math>28+34=62</math></p>  <p><u>Pencil and paper procedures</u> <math>94+43=137</math></p> <p><i>Either</i></p> <p><b>1. Vertical expansion</b>      <i>or</i>      <b>2. Horizontal expansion</b></p> $\begin{array}{r} 94 \\ + 43 \\ \hline 130 \\ 137 \end{array}$ $130+7 = 137$

## Year 4

## Addition Year 5

## Year 6

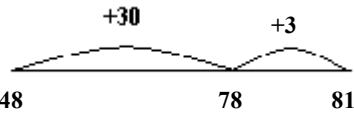
### + = signs and missing numbers

Continue as in Year 1, 2 and 3 but with appropriate numbers.

### Partition into tens and ones and recombine

Either partition both numbers and recombine or partition the second number only e.g.

$$\begin{aligned} 48+33 &= 48+30+3 \\ &= 78+3 \\ &= 81 \end{aligned}$$



### Add the nearest multiple of 10, then adjust

Continue as in Year 2 and 3 but with appropriate numbers  
E.g.  $43+39$  is the same as  $43+40-1$

### Pencil and paper procedures

$$568+287=855$$

Either

$$\begin{array}{r} 568 \\ +287 \\ \hline 15 \\ 140 \\ \hline 700 \\ \hline 855 \end{array}$$

or

$$\begin{array}{r} 500+60+8 \\ +200+80+7 \\ \hline 700+140+15=855 \end{array}$$

Leading to

$$\begin{array}{r} 568 \\ +287 \\ \hline 855 \\ \hline 11 \end{array}$$

Develop to decimals when recording money.

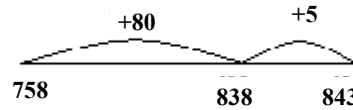
### + = signs and missing numbers

Continue as in Year 1,2,3 and 4 with appropriate numbers.

### Partition into hundreds, tens and ones and recombine

Either partition both numbers and recombine or partition the second number only

$$\begin{aligned} \text{E.g.} \\ 758+85 &= 758+80+5 \\ &= 838+5 \\ &= 843 \end{aligned}$$



### Add or subtract the nearest multiple of 10 or 100, then adjust

Continue as in Year 2, 3 and 4 but with appropriate numbers  
E.g.  $857+59$  = the same as  $857+60-1$

### Pencil and paper procedures

Extend to numbers with at least four digits  
 $7588+765=8353$

$$\begin{array}{r} 7588 \\ +765 \\ \hline 8353 \\ \hline 111 \end{array}$$

Go back to expanded methods if the children have difficulty with the above method.

Once the children are secure work up to two places of decimals (same number of decimal places) and adding several numbers (with different numbers of digits.)

$$\begin{array}{r} 86.9 \\ +54.6 \\ \hline 141.5 \\ \hline 1 \quad 1 \end{array}$$

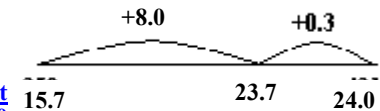
### + = signs and missing numbers

Continue as in Year 1, 2, 3, 4, 5 but with appropriate numbers.

### Partition into hundreds, tens, ones and decimal fractions and recombine

Either partition both numbers and recombine or partition the second number only

$$\begin{aligned} \text{E.g.} \\ 15.7+8.3 &= 15.7+8+0.3 \\ &= 23.7+0.3 \\ &= 24.0 \end{aligned}$$



### Add the nearest multiple of 10, 100 or 100 and then adjust

Continue as in year 2, 3, 4 and 5 but with appropriate numbers including extending to adding 0.9, 1.9, 2.9 etc.

### Pencil and paper procedures

Extend to numbers with any number of digits and decimals with 1, 2 and/or 3 decimal places.

$$16.78+7.783=24.563$$

$$\begin{array}{r} 16.78 \\ + 7.783 \\ \hline 24.563 \\ \hline 11 \quad 1 \end{array}$$

Go back to using expanded methods if the children experience any problems