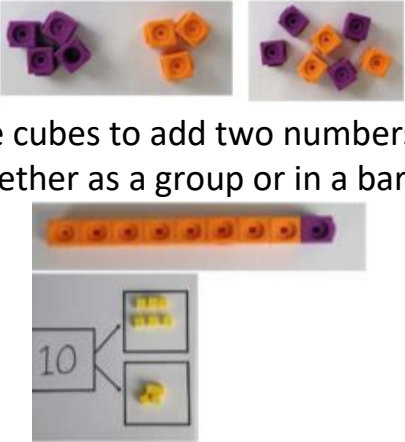
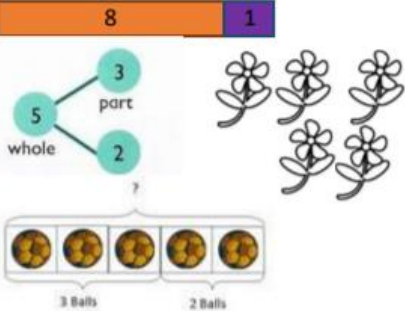
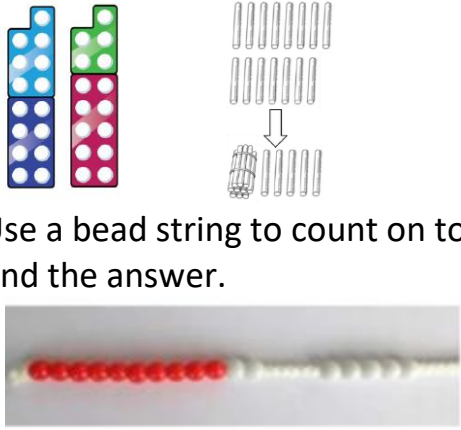
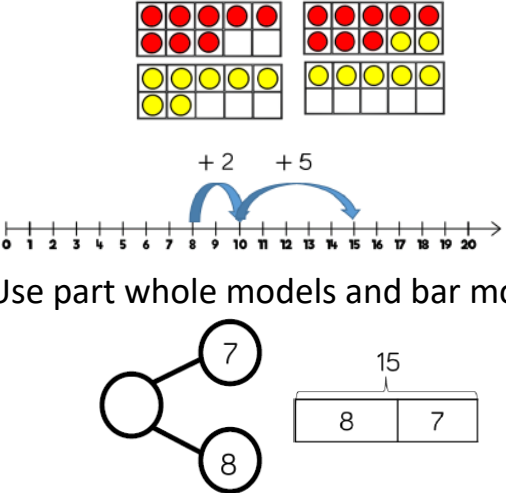
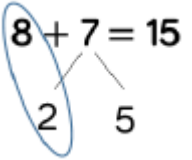
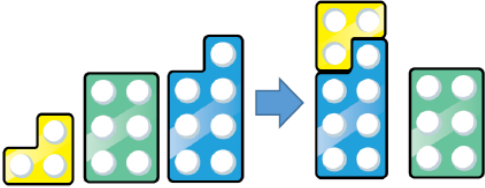
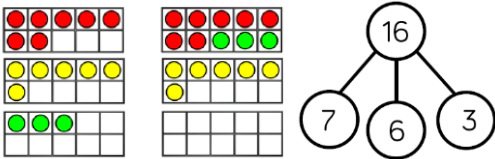

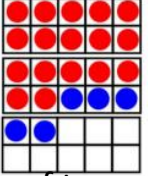
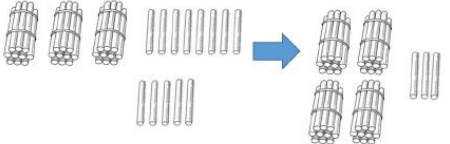

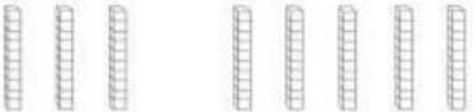
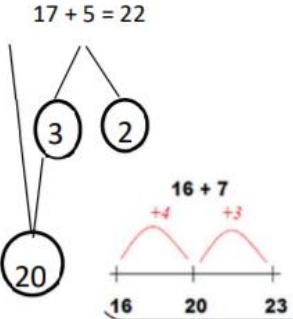

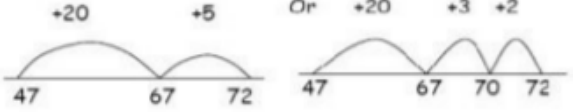
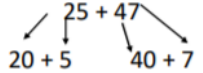
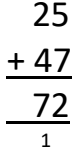
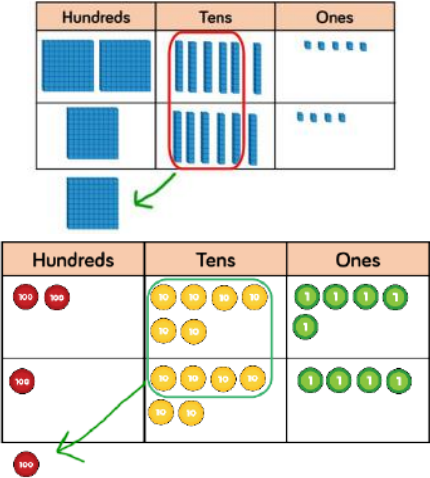
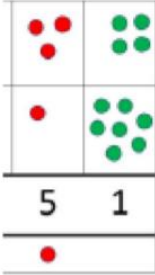
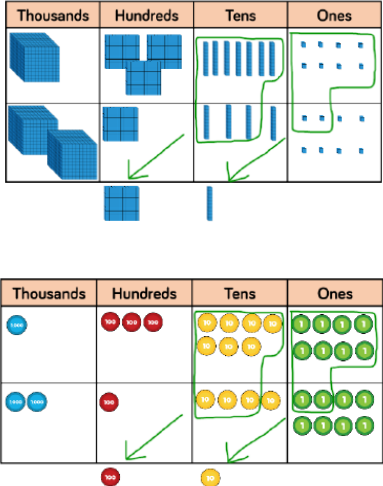
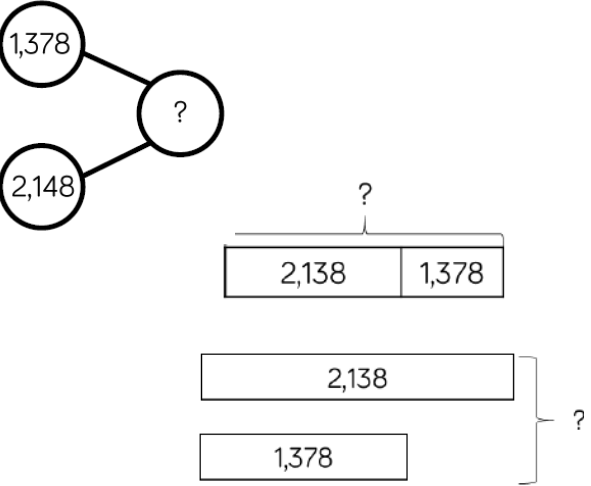
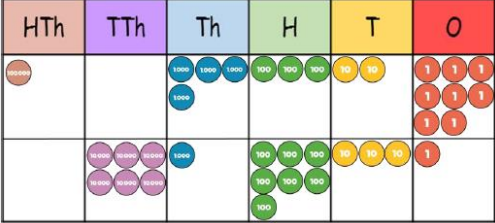
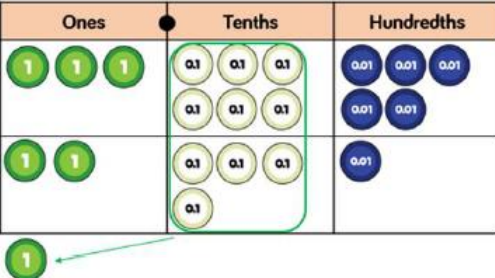
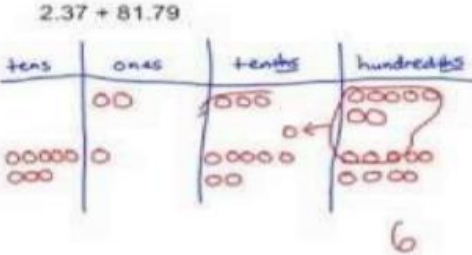
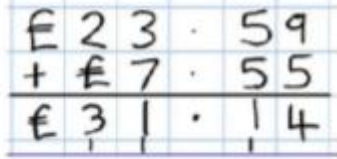


Calculations Policy – Addition

Year	Skill	Concrete examples	Pictorial examples	Abstract examples
1	Add two 1-digit numbers up to 10.	<p>Use part, part whole model.</p>  <p>Use cubes to add two numbers together as a group or in a bar.</p>	<p>Use pictures to add two numbers together as a group or in a bar.</p> 	<p>$5 + 3 = 8$ $8 = 5 + 3$</p> <p>Include missing number questions: $5 + ? = 8$ $8 = ? + 3$</p>
1	Add 1 and 2-digit numbers up to 20.	<p>Use Numicon to add two numbers together. Important to show regrouping of ten ones equalling 10.</p>  <p>Use a bead string to count on to find the answer.</p>	<p>Use tens frames and number lines to count on. Start at the bigger number and count on.</p>  <p>Use part whole models and bar models.</p>	<p>$8 + 7 = 15$</p>  <p>I am at 7, how many more do I need to make 15?</p>

2	Add three 1-digit numbers.	<p>Use of Numicon or Base 10 to look for number bonds to ten.</p> 	<p>Use of part whole model and tens frames. Regrouping to make 10.</p> 	<p>$7 + 6 + 3 = 16$</p> <p>Looking for number bonds to ten.</p> $7 + 6 + 3 = 16$  <p>Counting on in equal steps.</p> $4 + 4 + 4 + \dots$
2	Add 1 and 2-digit numbers to 100.	<p>Use ten frames.</p>  <p>Encourage regrouping of ten ones to make 10.</p>  <p>Use bead strings and Base 10 to add multiples of ten.</p> 	<p>Use representations for Base 10.</p>  <p>$3 \text{ tens} + 5 \text{ tens} = \dots \text{ tens}$ $30 + 50 = \dots$</p> <p>Use part whole and number lines to model.</p> 	<p>$23 + 25 = 48$</p> <p>Explore related facts:</p> $17 + 5 = 22$ $5 + 17 = 22$ $22 - 5 = 17$ $22 - 17 = 5$ <p>Use knowledge of doubles to solve near doubles: Find $24 + 25$ by knowing double 24 + 1</p>
2	Add two 2-digit numbers.	<p>Model using Base 10 or place value counters.</p> <p>$25 + 47$</p> 	<p>Use a number line and bridge ten using part whole if necessary.</p> 	<p>Use partitioning and start to show column method where appropriate.</p>  $25 + 47$ $20 + 5$ $20 + 40 = 60$ $5 + 7 = 12$ $60 + 12 = 72$ 

<p>3</p>	<p>Add numbers with up to three digits.</p>	<p>Use Base 10 and place value counters as manipulatives for exchanging.</p> 	<p>Draw visual representations to support calculations.</p>  $\begin{array}{r} 34 \\ +17 \\ \hline \end{array}$	<p>Use partitioning to show expanded column method.</p> $\begin{array}{r} 200 + 30 + 4 \\ + 400 + 20 = 6 \\ \hline 600 + 50 + 8 = 658 \end{array}$ <p>Start column addition with no grouping before moving on to column addition that requires grouping.</p> $\begin{array}{r} 234 \quad 356 \\ + 426 \quad + 265 \\ \hline 658 \quad 621 \\ \quad \quad 11 \end{array}$
<p>4</p>	<p>Add with up to four digits.</p>	<p>Continue to use Base 10 and place value counters as manipulatives for exchanging.</p> 	<p>Draw visual representations to support calculations including part whole models and bar models.</p> 	<p>Continue from previous work to carry hundreds as well as ones and tens using the column method.</p> $\begin{array}{r} 3517 \\ + 396 \\ \hline 3913 \\ \quad 11 \end{array}$

<p>5</p>	<p>Add numbers with more than four digits and with up to 2 decimal places.</p>	<p>Continue to use Base 10 and place value counters as manipulatives.</p>  <p>Use decimal place value counters to model exchanges.</p> 	<p>Draw visual representations to support calculations.</p> 	<p>Continue to use column method.</p> $\begin{array}{r} 72.8 \\ + 54.6 \\ \hline 127.4 \\ 11 \end{array}$  <p>Use of approximation.</p>
<p>6</p>	<p>Add several numbers of increasing complexity, including adding money, measure and decimals with different numbers of decimal points.</p>	<p>As Year 5.</p>	<p>As Year 5.</p>	<p>Column methods. Insert zeros for place holders.</p> 