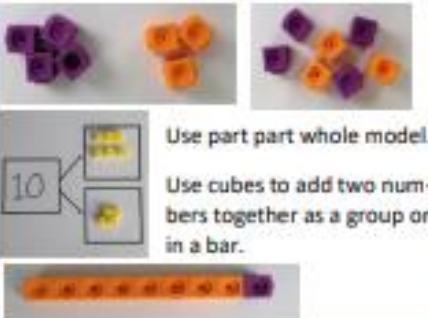
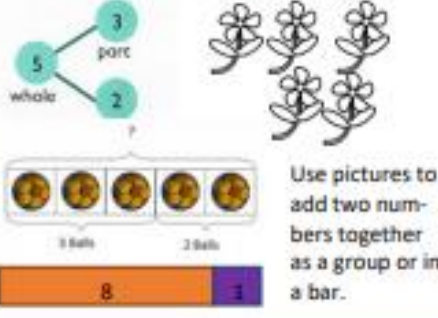
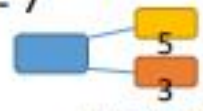

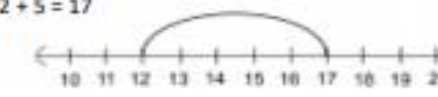
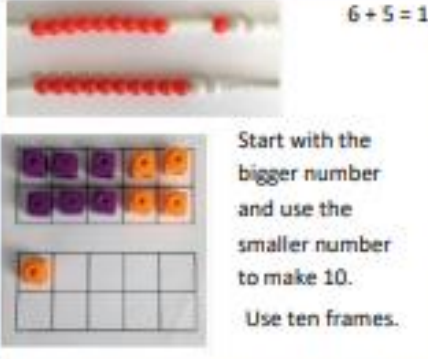
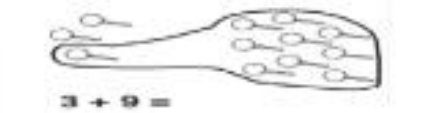
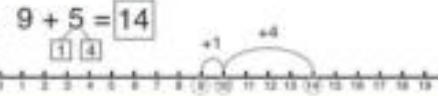


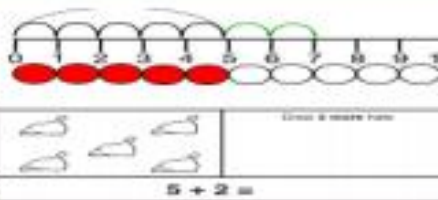
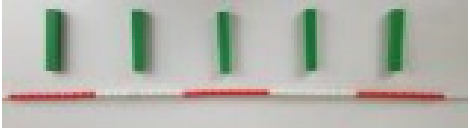
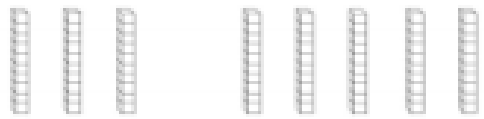
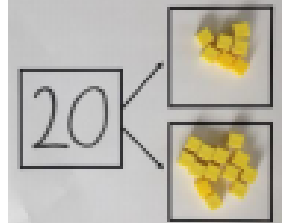
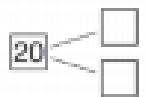
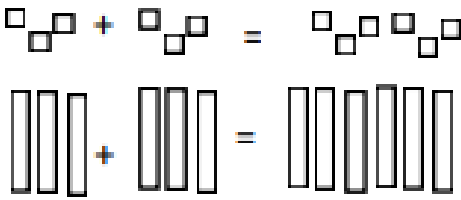
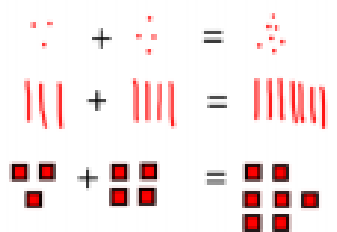


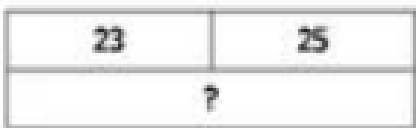


Objective & Strategy	Concrete	Pictorial	Abstract
Combining two parts to make a whole: part-whole model	 <p>Use part part whole model.</p> <p>Use cubes to add two numbers together as a group or in a bar.</p>	 <p>Use pictures to add two numbers together as a group or in a bar.</p>	$4 + 3 = 7$  $10 = 6 + 4$ Use the part-part whole diagram as shown above to move into the abstract.
Starting at the bigger number and counting on	 <p>Start with the larger number on the bead string and then count on to the smaller number 1 by 1 to find the answer.</p>	$12 + 5 = 17$  <p>Start at the larger number on the number line and count on in ones or in one jump to find the answer.</p>	$5 + 12 = 17$ Place the larger number in your head and count on the smaller number to find your answer.
Regrouping to make 10. <i>This is an essential skill for column addition later.</i>	 <p>Start with the bigger number and use the smaller number to make 10.</p> <p>Use ten frames.</p>	$3 + 9 =$  <p>Use pictures or a number line. Regroup or partition the smaller number using the part part whole model to make 10.</p> $9 + 5 = 14$ 	$7 + 4 = 11$ If I am at seven, how many more do I need to make 10. How many more do I add on now? 
Represent & use number bonds and related subtraction facts within 20	 <p>2 more than 5.</p>	 <p>$5 + 2 =$</p>	Emphasis should be on the language '1 more than 5 is equal to 6.' '2 more than 5 is 7.' '8 is 3 more than 5.'

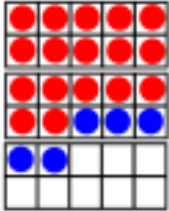
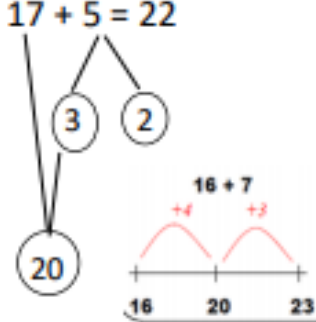
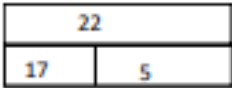

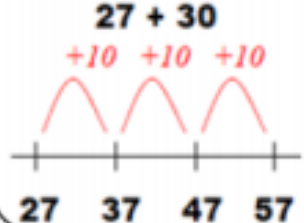

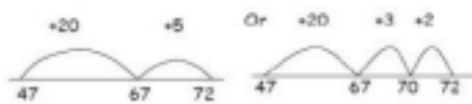
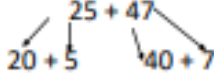

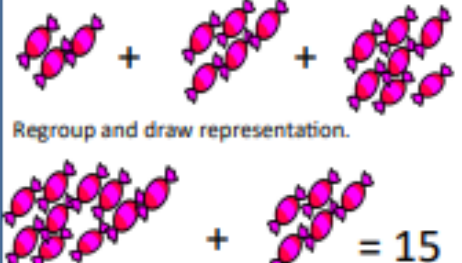
Y1

ADDITION +

Objective & Strategy	Concrete	Pictorial	Abstract
Adding multiples of ten	$50 - 30 = 20$  Model using dienes and bead strings	 $3 \text{ tens} + 5 \text{ tens} = \text{---} \text{ tens}$ $30 + 30 = \text{---}$ Use representations for base ten.	$20 + 30 = 50$ $70 = 50 + 20$ $40 + \square = 60$
Use known number facts <i>Part part whole</i>	 Children explore ways of making numbers within 20	 $\square + \square = 20$ $20 - \square = \square$ $\square + \square = 20$ $20 - \square = \square$	$\square + 1 = 16$ $16 - 1 = \square$ $1 + \square = 16$ $16 - \square = 1$
Using known facts	 $\square_{\square} + \square_{\square} = \square_{\square}\square_{\square}$ $\square_{\square} + \square_{\square} = \square_{\square}\square_{\square}$	 Children draw representations of H,T and O	$3 + 4 = 7$ <i>leads to</i> $30 + 40 = 70$ <i>leads to</i> $300 + 400 = 700$
Bar model	 $3 + 4 = 7$	 $7 + 3 = 10$	 $23 + 25 = 48$


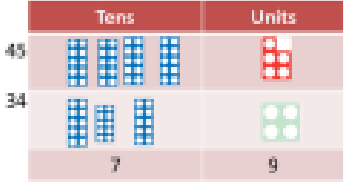
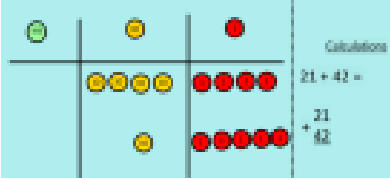
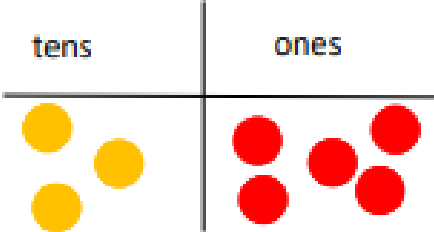
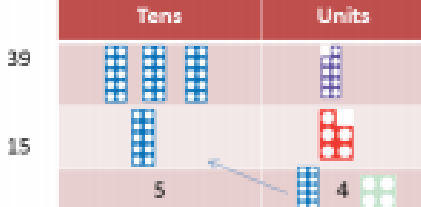
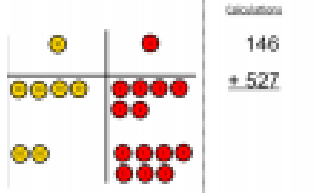
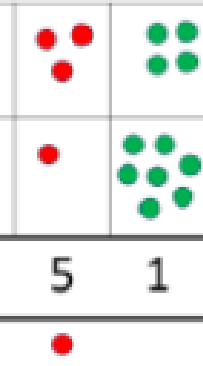
Y2 ADDITION

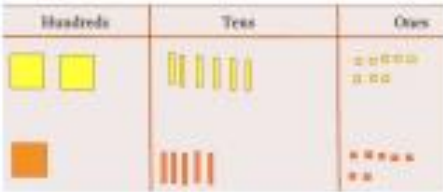
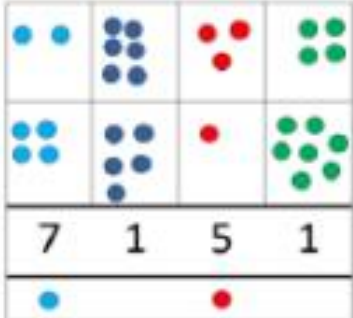
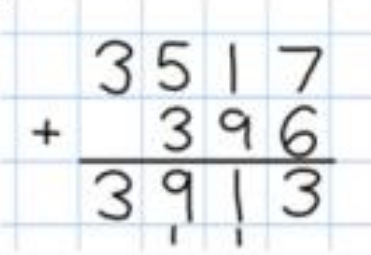
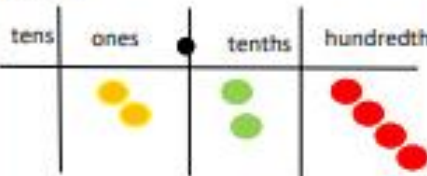
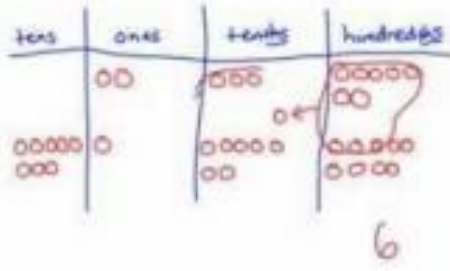
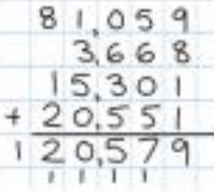



Objective & Strategy	Concrete	Pictorial	Abstract
Add a two digit number and ones	 <p>$17 + 5 = 22$</p> <p>Use ten frame to make 'magic ten'</p> <p>Children explore the pattern.</p> <p>$17 + 5 = 22$</p> <p>$27 + 5 = 32$</p>	<p>Use part part whole and number line to model.</p> <p>$17 + 5 = 22$</p> 	<p>$17 + 5 = 22$</p> <p>Explore related facts</p> <p>$17 + 5 = 22$</p> <p>$5 + 17 = 22$</p> <p>$22 - 17 = 5$</p> <p>$22 - 5 = 17$</p> 
Add a 2 digit number and tens	 <p>$25 + 10 = 35$</p> <p>Explore that the ones digit does not change</p>	<p>$27 + 30$</p> 	<p>$27 + 10 = 37$</p> <p>$27 + 20 = 47$</p> <p>$27 + \square = 57$</p>
Add two 2-digit numbers	 <p>Model using dienes, place value counters and numicon</p>	 <p>Use number line and bridge ten using part whole if necessary.</p>	<p>$25 + 47$</p>  <p>$20 + 40 = 60$</p> <p>$5 + 7 = 12$</p> <p>$60 + 12 = 72$</p>
Add three 1-digit numbers	 <p>Combine to make 10 first if possible, or bridge 10 then add third digit</p>	 <p>Regroup and draw representation.</p> <p>$4 + 7 + 6 = 17$</p>	<p>$4 + 7 + 6 = 10 + 7$</p> <p>$= 17$</p> <p>Combine the two numbers that make/ bridge ten then add on the third.</p>

Y2

ADDITION +

Objective & Strategy	Concrete	Pictorial	Abstract
<p>Column Addition—no regrouping (friendly numbers)</p> <p>Add two or three 2 or 3-digit numbers.</p>	 <p>Model using Dienes or numicon</p> <p>Add together the ones first, then the tens.</p>   <p>Move to using place value counters</p>	<p>Children move to drawing the counters using a tens and one frame.</p> 	$\begin{array}{r} 223 \\ + 114 \\ \hline 337 \end{array}$ <p>Add the ones first, then the tens, then the hundreds.</p>
<p>Column Addition with regrouping.</p>	 <p>Exchange ten ones for a ten. Model using numicon and pv counters.</p> 	<p>Children can draw a representation of the grid to further support their understanding, carrying the ten <u>underneath</u> the line</p> 	$\begin{array}{r} 20 + 5 \\ 40 + 8 \\ 60 + 13 = 73 \end{array}$ <p>Start by partitioning the numbers before formal column to show the exchange.</p> $\begin{array}{r} 536 \\ + 85 \\ \hline 621 \\ 11 \end{array}$

Objective & Strategy	Concrete	Pictorial	Abstract
Y4—add numbers with up to 4 digits	<p>Children continue to use dienes or pv counters to add, exchanging ten ones for a ten and ten tens for a hundred and ten hundreds for a thousand.</p> 	 <p>Draw representations using pv grid.</p>	 <p>Continue from previous work to carry hundreds as well as tens. Relate to money and measures.</p>
Y5—add numbers with more than 4 digits. Add decimals with 2 decimal places, including money.	<p>As year 4</p>  <p>Introduce decimal place value counters and model exchange for addition.</p>	<p>2.37 + 81.79</p> 	<p>72.8 + 54.6 <u>127.4</u></p> <p>1 1 £ 23.59 + £ 7.55 <u>£ 31.14</u></p>
Y6—add several numbers of increasing complexity Including adding money, measure and decimals with different numbers of decimal points.	<p>As Y5</p>	<p>As Y5</p>	 <p>Insert zeros for place holders.</p> 

Y4-6

ADDITION +