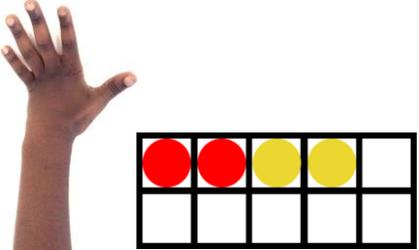
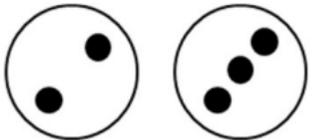
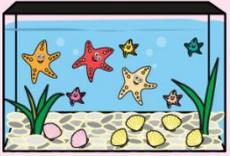


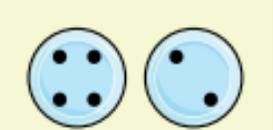
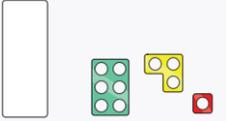
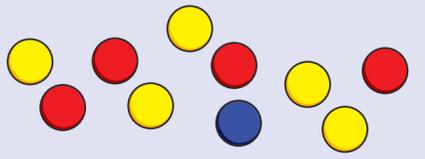
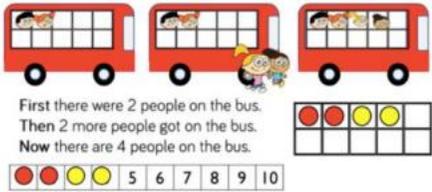
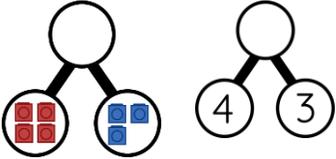


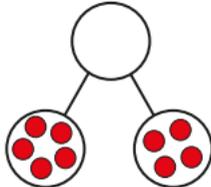
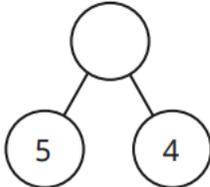
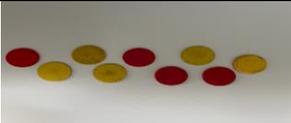
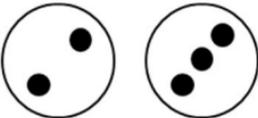
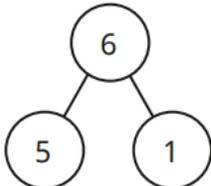
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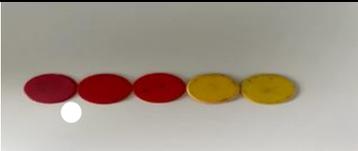
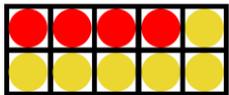
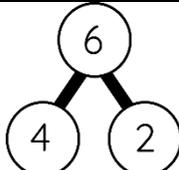
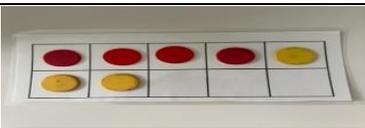
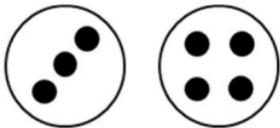
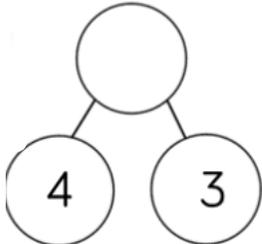
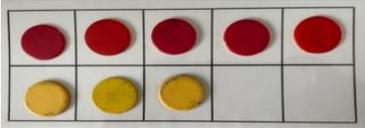
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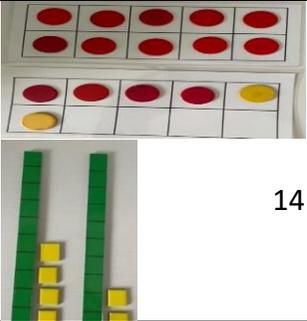
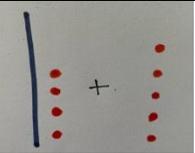
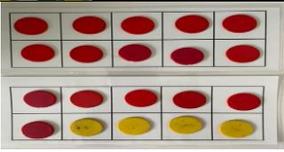
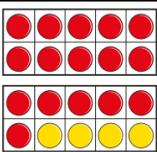
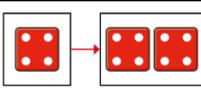
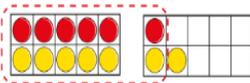
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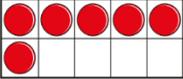
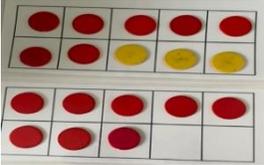
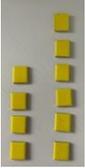
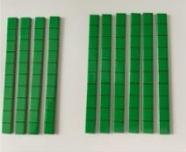
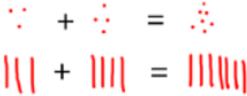
EYFS:			
Vocabulary :	first, then, now, add, plus, altogether, total, part, whole	Manipulatives & scaffolds:	Fingers Five frames Ten frames Double sided counters Numicon Cubes Bead strings Part-whole model
Small step:	Concrete:	Pictorial:	Abstract:
Combining two groups	Children begin to combine 2 groups of objects to find how many there are altogether 		How many ___ can you see? How many ___ can you see? How many can you see altogether?
1 more	 There are 7 altogether. 1 more than 6 is 7. 7 is 1 more than 6.	 There are 7 (starfish). 1 more than 7 is 8. 8 is 1 more than 7.	There are ___ There are ___ altogether. ___ is 1 more than ___ 1 more than ___ is ___

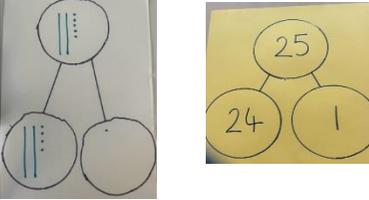
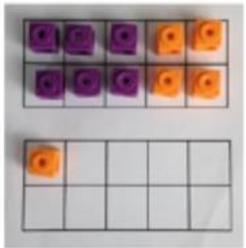
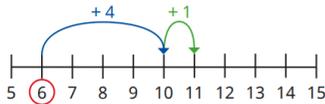
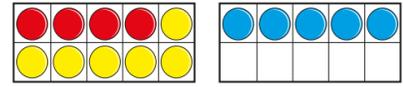
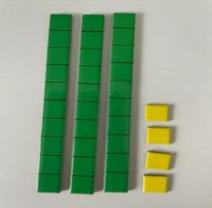
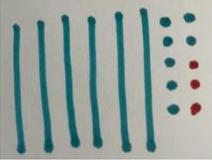
<p>Combine two groups</p>	 <p>There are 3 here and 4 there. There are 7 altogether. 3 and 4 make 7.</p>	 <p>There are 4 dots and 2 dots. There are 6 altogether. 4 and 2 make 6.</p>	<p>There are ___ here and ___ there. There are ___ altogether. ___ and ___ make ___</p>
<p>Bonds to 10 (2 parts)</p>	 <p>The whole is 10. 6 is a part and 4 is a part. 6 and 4 are a bond to 10. If 6 is a part then the other part must be 4.</p>	 <p>The whole is 10 If 6 is a part then the other part must be 4. 6 and 4 are a bond to 10.</p>	<p>The whole is ___ ___ is a part and ___ is a part ___ and ___ are a bond to 10 If ___ is a part, then the other part must be ___</p>
<p>Bonds to 10 (3 parts)</p>	 <p>Use 3 Numicon pieces to cover a 10 piece. The whole is 10. I can see that 10 is made up of 6 and 3 and 1.</p>	 <p>There are 10 counters, the whole is 10. I can see that 10 is made up of 5 and 4 and 1.</p>	<p>I can see that 10 is made up of ___ and ___ and ___.</p>
<p>Adding more</p>	<p>Combine two groups of objects using practical resources, role play, stories and songs:</p>  <p>$5 + 3 = 8$</p>	 <p>First there were 2 people on the bus. Then 2 more people got on the bus. Now there are 4 people on the bus.</p>	 <p>$4 + 3 = 7$</p>

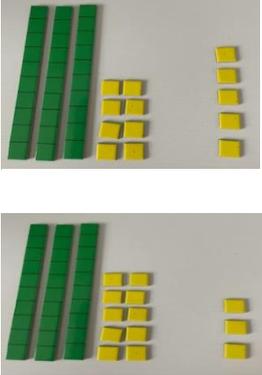
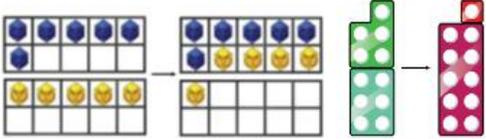
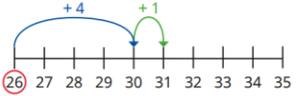
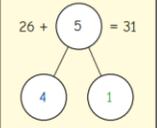
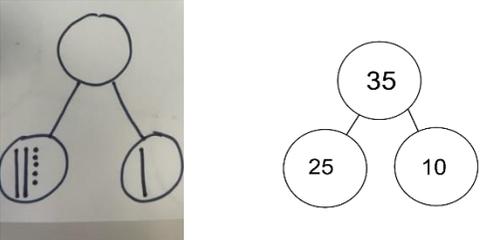
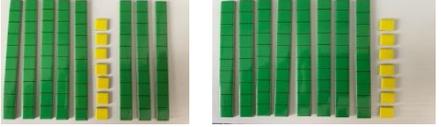
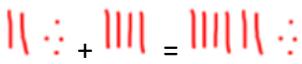
Y1			
Vocabulary:	add, plus, altogether, total, part, whole, 2-digit number, sum, addition, more, and, makes, double	Manipulatives & scaffolds:	Ten frames Double sided counters Numicon Cubes Bead strings Part-whole model Bar model
Small step:	Concrete:	Pictorial:	Abstract:
Understand part and whole relationships	<p>Here are some frogs.</p> <ul style="list-style-type: none"> ▶ Can you see two groups of frogs? ▶ How many frogs are in each group? ▶ Complete the sentences. <p>___ is a part. ___ is a part. The whole is ___</p> 	 <p>___ is a part ___ is a part The whole is ___</p>	 <p>___ is a part ___ is a part The whole is ___</p>
Write number sentences	 <p>Here are some counters. Group the counters by colour.</p> <p>___ red counters plus ___ yellow counters is equal to ___ counters.</p>	<p>2 + 3 = 5</p> 	
Fact families – addition facts	 <p>First there were 3 children on the bus. Then 2 more children got on the bus. Now there are 5 children on the bus.</p>	 <p>___ + ___ = 7 7 = ___ + ___ ___ + ___ = 7 7 = ___ + ___</p>	 <p>5 + 1 = 6 1 + 5 = 6 6 = 5 + 1 6 = 1 + 5</p>

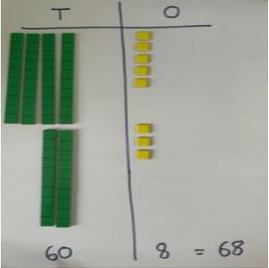
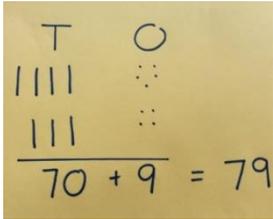
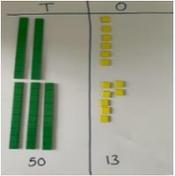
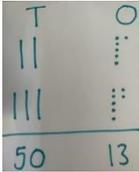
<p>Number bonds within 10</p>	 <p>$3 + 2 = 5$</p>	 <p>$4 + 1 = 5$</p>  <p>$4 + 6 = 10$</p>	 <p>$4 + 2 = 6$</p> 
<p>Add together</p>	 <p>$4 + 3 = 7$</p>	 <p>$3 + 4 = 7$</p>	 <p>$4 + 3 = 7$</p>
<p>Add more</p>	 <p>Put 2 counters in a tens frame. Now add 8 more counters. How many counters are there altogether?</p>	<p>$4 + 3 =$</p> 	 <p>$5 + \underline{\quad} = \underline{\quad}$</p>
<p>Add by counting on within 20</p>	 <p>First</p>  <p>Then</p>  <p>Now</p> <p>First there were 5 counters Then I added 3 Now there are 8 counters</p>	<p>Ann has 13 marbles. She gets 5 more marbles. How many marbles does Ann have now?</p> 	 <p>$9 + 6 = \underline{\quad}$</p>

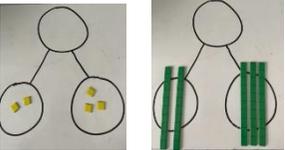
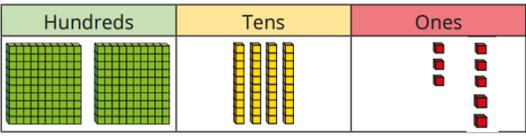
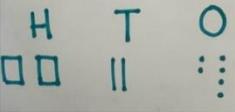
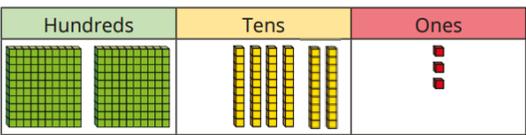
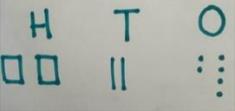
<p>Adding ones using number bonds</p>	 <p style="text-align: center;">$14 + 2 =$</p>	 <p>$14 + 2 =$</p>	<p>$12 + 4 =$</p>
<p>Find and make number bonds to 20</p>	 <p style="text-align: center;">$16 + 4 = 20$</p>	 <p style="text-align: center;">$4 + 16 = 20$</p>	<p>$20 = _ + _$ $20 = _ + _$</p>
<p>Doubles</p>	 <p style="text-align: center;">Double 7 is $_$</p>	 <p style="text-align: center;">Double 4 is $_$</p>	<p>Double $_$ is $_$</p>
<p>Near doubles</p>	 <p>$6 + 7 =$ $6 + 6 + 1 =$ Double $6 + 1 =$</p>	 <p>$6 + 7 =$ double $_$ plus $_$</p>	<p>Use doubles to work out the near doubles: $4 + 5 =$ $6 + 7 =$ $8 + 7 =$</p>

Y2			
Vocabulary:	add, plus, altogether, total, part, whole, 2-digit number, sum, addition, more, and, makes, double, ones, tens, partition, bonds, commutative	Manipulatives & scaffolds:	Ten frames Double sided counters Numicon Cubes Base 10/Dienes Part-whole model Bar model Number line Place value charts
Small step:	Concrete:	Pictorial:	Abstract:
Bonds to 10	 $_ + _ = 10$	 $5 + _ = 10$	$_ + _ = 10$ $10 = _ + _$
Fact families – addition bonds within 20	 $_ + _ = _$ $_ + _ = _$ $_ = _ + _$ $_ = _ + _$		$_ + _ = _$ $_ + _ = _$ $_ = _ + _$ $_ = _ + _$
Bonds to 100 (tens)	 $4 + 6 = 10$  $40 + 60 = 100$	 $3 + 4 = 7$ $30 + 40 = 70$	$_ + _ = 100$ $100 = _ + _$

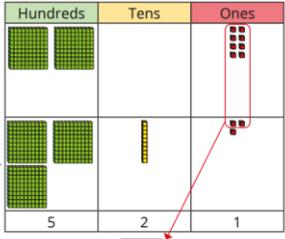
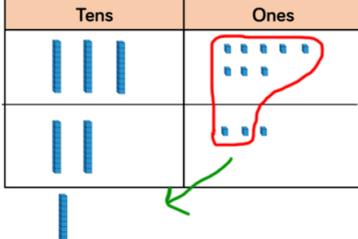
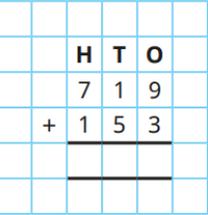
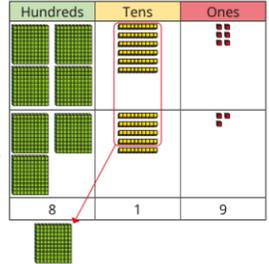
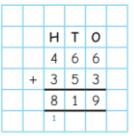
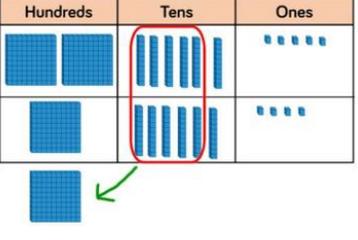
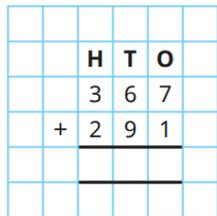
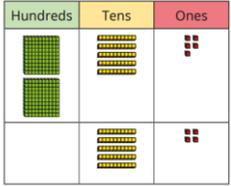
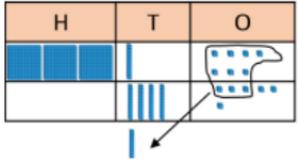
<p>Add ones</p>	 <p>$24 + 1 = 25$</p>		<p>$46 + 1 =$ $46 + 2 =$ $46 + 3 =$</p>
<p>Add by making 10</p>	 <p>$6 + 5 = 10 + 1 = 11$</p>	 <p>$6 + 5 = 10 + 1$ $= 11$</p>	<p>$7 + 4 = 11$</p> <p><i>If I have seven, how many more do I need to make ten?</i></p> <p><i>How many more do I need to add?</i></p>
<p>Add three 1-digit numbers</p>	 <p>$7 + 2 + 3 =$</p>	 <p>$4 + 6 + 6 =$</p>	<p>$7 + 5 + 3 =$</p> <p>$7 + 5 + 3 = 15$</p>
<p>Add to the next 10</p>	 <p>The Base 10 shows 34 How many tens are there in 34? What is the multiple of 10 after 34? How many ones are there in 34? How many more ones do I need to add to get to the next multiple of 10? $34 + \underline{\quad} = \underline{\quad}$</p>	 <p>$67 + \underline{\quad} = 70$</p>	<p>$45 + \underline{\quad} = 50$ $81 + \underline{\quad} = 90$ $32 + \underline{\quad} = 40$</p>

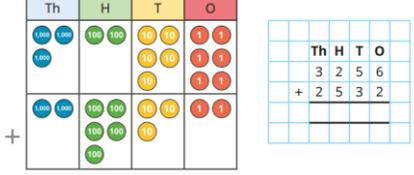
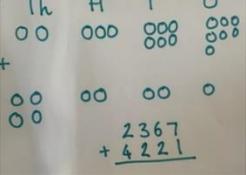
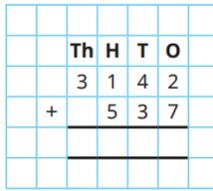
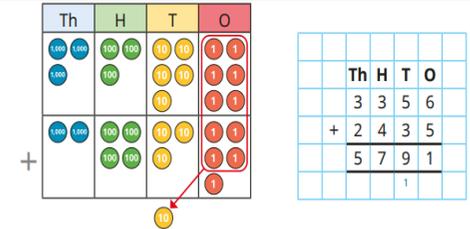
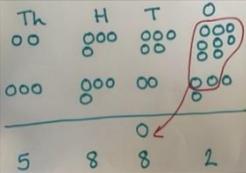
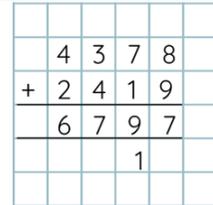
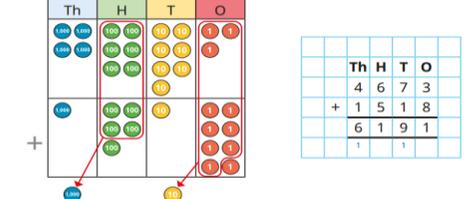
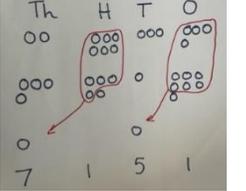
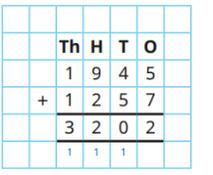
<p>Add across a ten</p>	 <p>$38 + 5 = 40 + 3$</p>  <p>Use Numicon to show the crossing of the boundary</p>	 	<p>$67 + 5 =$</p>
<p>10 more</p>	 <p>$25 + 10 = 35$</p>		<p>$25 + 10 = 35$ $10 + 25 = 35$ $35 = 25 + 10$ $35 = 10 + 25$</p>
<p>Add 10s</p>	 <p>$57 + 30 = 87$</p>	 <p>$24 + 40 = 64$</p>	<p>$23 + 10$ $54 + 40$</p>

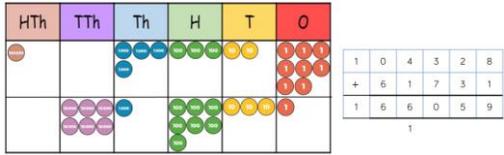
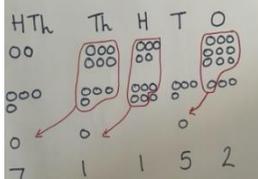
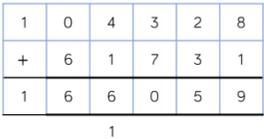
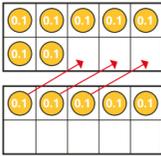
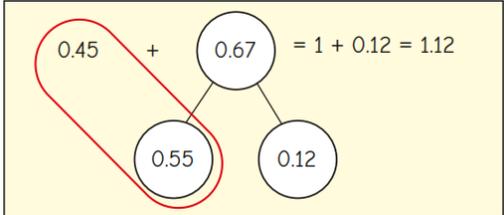
<p>Add two 2-digit numbers (not across a ten)</p>	 <p>60 + 8 = 68</p>	<p>45 + 34 =</p>  <p>70 + 9 = 79</p>	<p>52 + 14 23 + 31</p>
	 <p>50 + 13 =</p> <p>20 + 30 = 50 6 + 7 = 13 50 + 13 = 63</p>	<p>26 + 37 =</p>  <p>50 + 13 =</p> <p>20 + 30 = 50 6 + 7 = 13 50 + 13 = 63</p>	<p>26 + 37 46 + 27 = 17 + 33 =</p>

Y3			
Vocabulary:	add, plus, altogether, total, part, whole, 2-digit number, sum, addition, more, and, makes, double, ones, tens, partition, bonds, exchange, regroup, hundreds	Manipulatives & scaffolds:	Ten frames Double sided counters Numicon Cubes Base 10/Dienes Part-whole model Bar model Number line Place value charts Place value counters
Small step:	Concrete:	Pictorial:	Abstract:
Apply number bonds	 $2 + 3 = 5$ $20 + 30 = 50$	 $_ + 2 = 8$ $_ + 20 = 80$	$2 + _ = 5$ $20 + _ = 50$
Add ones	 $243 + 5 =$	 $222 + 4 =$	Children to use place value knowledge: $354 + 4$ $215 + 3$ $461 + 8$
Add tens	 $243 + 20 =$	 $226 + 30 =$	Children to use place value knowledge: $546 + 30$ $743 + 50$ $229 + 60$

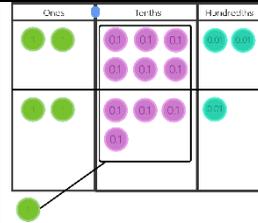
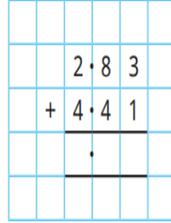
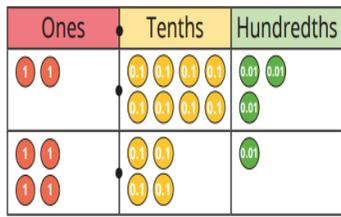
<p>Add hundreds</p>	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="background-color: #d9ead3;">Hundreds</th> <th style="background-color: #fff2cc;">Tens</th> <th style="background-color: #f4cccc;">Ones</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>$243 + 200 =$</p>	Hundreds	Tens	Ones				<p>$256 + 300 =$</p>	<p>Children to use place value knowledge:</p> <p>$378 + 400$ $579 + 300$ $285 + 600$</p>																																			
Hundreds	Tens	Ones																																										
<p>Add 1s across a ten</p>	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="background-color: #d9ead3;">Hundreds</th> <th style="background-color: #fff2cc;">Tens</th> <th style="background-color: #f4cccc;">Ones</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>$243 + 9 =$ $243 + 7 = 250 + 2 =$ 252</p>	Hundreds	Tens	Ones				<p>$248 + 6 =$ $248 + 2 = 250 + 4 =$ 254</p>	<p>$248 + 9$</p>																																			
Hundreds	Tens	Ones																																										
<p>Add 10s across a hundred</p>	<p>$60 + 50 =$ $60 + 40 = 100$ $100 + 10 = 110$</p>	<p>$350 + 80 =$ $350 + 50 = 400 + 30 = 430$</p>	<p>$695 + 80$ $476 + 60$</p>																																									
<p>Add two numbers (no exchange)</p>	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="background-color: #fff2cc;">Tens</th> <th style="background-color: #f4cccc;">Ones</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table> <p>$+$</p> <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th>T</th> <th>O</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>4</td> </tr> <tr> <td>+ 2</td> <td>3</td> </tr> <tr> <td colspan="2"><hr/></td> </tr> </tbody> </table>	Tens	Ones					T	O	3	4	+ 2	3	<hr/>		<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th>H</th> <th>T</th> <th>O</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>+ 4</td> <td>3</td> <td>2</td> </tr> <tr> <td colspan="3"><hr/></td> </tr> <tr> <td>7</td> <td>7</td> <td>7</td> </tr> </tbody> </table>	H	T	O	3	4	5	+ 4	3	2	<hr/>			7	7	7	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th>H</th> <th>T</th> <th>O</th> </tr> </thead> <tbody> <tr> <td>5</td> <td>2</td> <td>4</td> </tr> <tr> <td>+ 3</td> <td>7</td> <td>3</td> </tr> <tr> <td colspan="3"><hr/></td> </tr> </tbody> </table>	H	T	O	5	2	4	+ 3	7	3	<hr/>		
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<p>Add two numbers (across a ten)</p>	 	 $\begin{array}{r} 38 \\ + 23 \\ \hline 61 \\ 1 \end{array}$	
<p>Add two numbers (across a hundred)</p>	 	 $\begin{array}{r} 265 \\ + 164 \\ \hline 429 \\ 1 \end{array}$	
<p>Add two three digit numbers</p>	<p>Expanded method using diennes if needed.</p> $\begin{array}{l} 243 = 200 + 40 + 3 \\ + 368 = 300 + 60 + 8 \\ \hline 611 = 500 + 100 + 11 \end{array}$	<p>Children to then move this to a vertical method, to help explain the carrying.</p> $\begin{array}{r} 243 \\ + 368 \\ \hline 11 \text{ (3+8)} \\ 100 \text{ (40+60)} \\ \underline{500} \text{ (200+300)} \\ 611 \end{array}$	<p>Resulting in using the formal method</p> $\begin{array}{r} 243 \\ + 368 \\ \hline 611 \\ 11 \end{array}$
<p>Add 2-digit and 3-digit numbers</p>	 	 	<p>537 + 82 =</p>

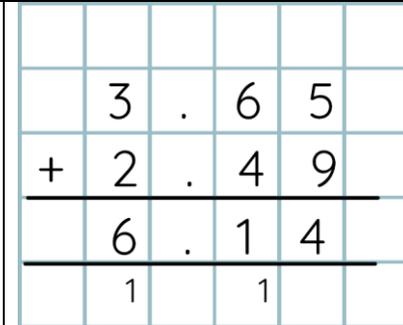
Y4			
<p>Vocabulary:</p>	<p>add, plus, altogether, total, part, whole, 2-digit number, sum, addition, more, and, makes, double, ones, tens, partition, bonds, exchange, regroup, hundreds, thousands</p>	<p>Manipulatives & scaffolds:</p>	<p>Ten frames Double sided counters Numicon Cubes Base 10/Dienes Part-whole model Bar model Number line Place value charts Place value counters</p>
Small step:	Concrete:	Pictorial:	Abstract:
<p>Add up to two 4-digit numbers – no exchange</p>			
<p>Add two 4-digit numbers – one exchange</p>		 <p>2458 + 3424</p>	
<p>Add two 4-digit numbers – more than one exchange</p>		 <p>2634 + 4517</p>	

Y5			
Vocabulary:	add, plus, altogether, total, part, whole, 2-digit number, sum, addition, more, and, makes, double, ones, tens, partition, bonds, exchange, regroup, hundreds, thousands, decimals, tenths, hundredths, thousandths, decimal point	Manipulatives & scaffolds:	Ten frames Double sided counters Numicon Cubes Base 10/Dienes Part-whole model Bar model Number line Place value charts Place value counters
Small step:	Concrete:	Pictorial:	Abstract:
Add whole numbers with more than four digits	 <p>A concrete representation of the addition 26509 + 44643. It shows two place value charts with columns labeled HTh, TTh, Th, H, T, O. The first chart has 2 purple blocks in HTh, 6 blue blocks in TTh, 5 green blocks in Th, 0 yellow blocks in H, 9 orange blocks in T, and 9 red blocks in O. The second chart has 4 purple blocks in HTh, 4 blue blocks in TTh, 6 green blocks in Th, 4 yellow blocks in H, 6 orange blocks in T, and 3 red blocks in O. A third chart shows the sum: 1 purple block in HTh, 6 blue blocks in TTh, 6 green blocks in Th, 0 yellow blocks in H, 5 orange blocks in T, and 9 red blocks in O. A small grid shows the numbers 104328, 61731, and 166059 with a 1 below the 9.</p>	 <p>A pictorial representation of the addition 26509 + 44643 using base ten blocks. The blocks are arranged in columns labeled HTh, TTh, Th, T, O. The first number 26509 is represented by 2 purple blocks, 6 blue blocks, 5 green blocks, 0 yellow blocks, and 9 orange blocks. The second number 44643 is represented by 4 purple blocks, 4 blue blocks, 6 green blocks, 4 yellow blocks, and 3 orange blocks. The sum 71152 is shown below with 7 purple blocks, 1 blue block, 1 green block, 1 yellow block, 5 orange blocks, and 2 red blocks. A small grid shows the numbers 26509, 44643, and 71152.</p>	 <p>An abstract representation of the addition 26509 + 44643 using a grid. The grid has columns labeled 1, 0, 4, 3, 2, 8 and rows labeled +, 6, 1, 7, 3, 1. The sum 166059 is shown below the grid. A small grid shows the numbers 104328, 61731, and 166059 with a 1 below the 9.</p>
Add decimals across one	<p>0.7 + 0.5</p>  <p>A concrete representation of the addition 0.7 + 0.5 using base ten blocks. The first number 0.7 is represented by 7 yellow blocks in the tenths column. The second number 0.5 is represented by 5 yellow blocks in the tenths column. The sum 1.2 is shown below with 1 purple block in the ones column and 2 yellow blocks in the tenths column. A small box contains the equations: 0.7 + 0.3 = 1, 1 + 0.2 = 1.2, 0.7 + 0.5 = 1.2.</p>	<p>0.45 + 0.67</p>  <p>A pictorial representation of the addition 0.45 + 0.67 using a part-whole model. The number 0.45 is in a circle, and the number 0.67 is in a circle. They are added together to equal 1 + 0.12 = 1.12. The number 0.55 is in a circle, and the number 0.12 is in a circle. A red oval highlights the 0.45 and 0.67 circles.</p>	<p>0.74 + 0.42</p>

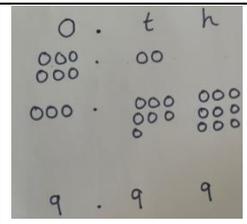
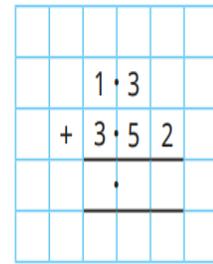
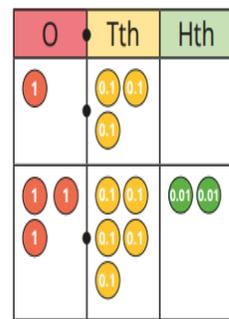
Add decimals
with the same
number of
decimal places



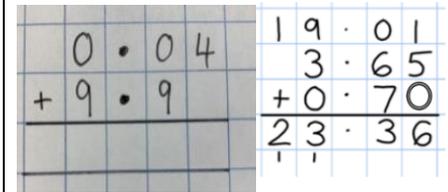
$$\begin{array}{r} 2.62 \\ + 2.41 \\ \hline \end{array}$$

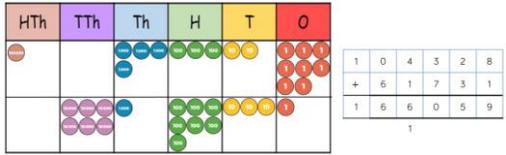
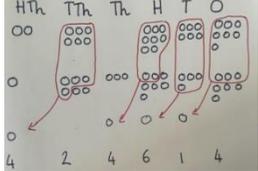
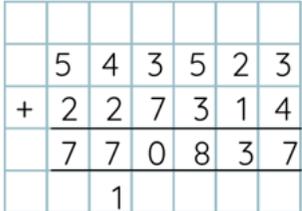
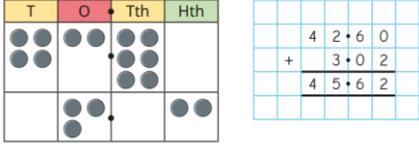
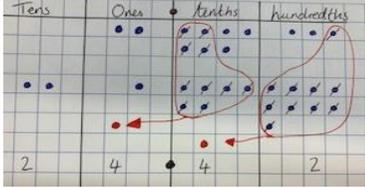


Add decimals
with a different
number of
decimal places



$$\begin{array}{r} 6.2 \\ + 3.79 \\ \hline \end{array}$$



Y6			
Vocabulary:	add, plus, altogether, total, part, whole, 2-digit number, sum, addition, more, and, makes, double, ones, tens, partition, bonds, exchange, regroup, hundreds, thousands, decimals, tenths, hundredths, thousandths, decimal point, integer	Manipulatives & scaffolds:	Ten frames Double sided counters Numicon Cubes Base 10/Dienes Part-whole model Bar model Number line Place value charts Place value counters
Small step:	Concrete:	Pictorial:	Abstract:
Add integers		 $\begin{array}{r} 260867 \\ + 163747 \\ \hline \end{array}$	
Add decimals		 $1.73 + 21.69 =$	<p>Insert zeros for place holders.</p> 