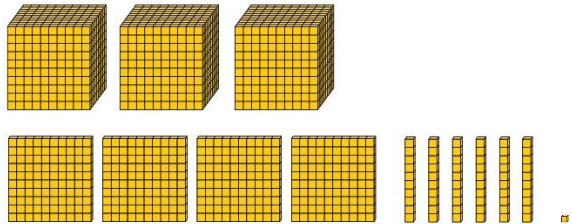
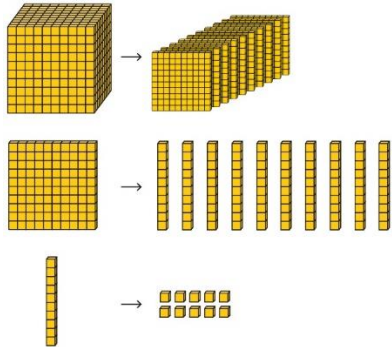
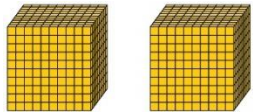
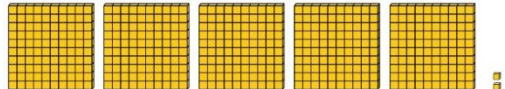
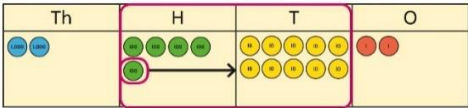
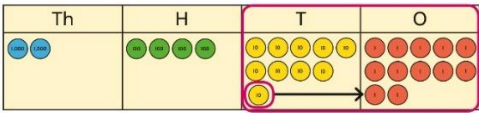


Year 4 Subtraction																																			
<p>Choosing mental methods where appropriate</p>	<p>Use place value equipment to justify mental methods.</p>  <p><i>What number will be left if we take away 300?</i></p>	<p>Use place value grids to support mental methods where appropriate.</p> <table border="1"> <thead> <tr> <th>Th</th> <th>H</th> <th>T</th> <th>O</th> </tr> </thead> <tbody> <tr> <td>●●●●</td> <td>●●●●●●</td> <td>●●●●</td> <td>●●●●</td> </tr> <tr> <td>●●●●</td> <td>●●●●●●</td> <td>●●●●</td> <td>●●●●</td> </tr> </tbody> </table> <p>$7,646 - 40 = 7,606$</p>	Th	H	T	O	●●●●	●●●●●●	●●●●	●●●●	●●●●	●●●●●●	●●●●	●●●●	<p>Use knowledge of place value and unitising to subtract mentally where appropriate.</p> <p>$3,501 - 2,000$</p> <p><i>3 thousands - 2 thousands = 1 thousand</i></p> <p>$3,501 - 2,000 = 1,501$</p>																				
Th	H	T	O																																
●●●●	●●●●●●	●●●●	●●●●																																
●●●●	●●●●●●	●●●●	●●●●																																
<p>Column subtraction with exchange</p>	<p>Understand why exchange of a 1,000 for 100s, a 100 for 10s, or a 10 for 1s may be necessary.</p> 	<p>Represent place value equipment on a place value grid to subtract, including exchanges where needed.</p> <table border="1"> <thead> <tr> <th>Th</th> <th>H</th> <th>T</th> <th>O</th> </tr> </thead> <tbody> <tr> <td>●</td> <td>●●●●</td> <td>●●●●</td> <td></td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Th</th> <th>H</th> <th>T</th> <th>O</th> </tr> </thead> <tbody> <tr> <td>●</td> <td>●●●●</td> <td>●●●●</td> <td></td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Th</th> <th>H</th> <th>T</th> <th>O</th> </tr> </thead> <tbody> <tr> <td>●</td> <td>●●●●</td> <td>●●●●</td> <td></td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Th</th> <th>H</th> <th>T</th> <th>O</th> </tr> </thead> <tbody> <tr> <td></td> <td>●●●●</td> <td>●●●●</td> <td></td> </tr> </tbody> </table>	Th	H	T	O	●	●●●●	●●●●		Th	H	T	O	●	●●●●	●●●●		Th	H	T	O	●	●●●●	●●●●		Th	H	T	O		●●●●	●●●●		<p>Use column subtraction, with understanding of the place value of any exchange required.</p>
Th	H	T	O																																
●	●●●●	●●●●																																	
Th	H	T	O																																
●	●●●●	●●●●																																	
Th	H	T	O																																
●	●●●●	●●●●																																	
Th	H	T	O																																
	●●●●	●●●●																																	

			<table style="margin-bottom: 10px;"> <tr><td>Th</td><td>H</td><td>T</td><td>O</td></tr> <tr><td>1</td><td>2</td><td>5</td><td>0</td></tr> <tr><td>-</td><td>4</td><td>2</td><td>0</td></tr> <tr><td colspan="4"><hr/></td></tr> <tr><td></td><td></td><td></td><td>0</td></tr> </table> <table style="margin-bottom: 10px;"> <tr><td>Th</td><td>H</td><td>T</td><td>O</td></tr> <tr><td>1</td><td>2</td><td>5</td><td>0</td></tr> <tr><td>-</td><td>4</td><td>2</td><td>0</td></tr> <tr><td colspan="4"><hr/></td></tr> <tr><td></td><td></td><td>3</td><td>0</td></tr> </table> <table style="margin-bottom: 10px;"> <tr><td>Th</td><td>H</td><td>T</td><td>O</td></tr> <tr><td>1</td><td>2</td><td>5</td><td>0</td></tr> <tr><td>-</td><td>4</td><td>2</td><td>0</td></tr> <tr><td colspan="4"><hr/></td></tr> <tr><td>8</td><td>3</td><td>0</td><td></td></tr> </table> <table> <tr><td>Th</td><td>H</td><td>T</td><td>O</td></tr> <tr><td>1</td><td>2</td><td>5</td><td>0</td></tr> <tr><td>-</td><td>4</td><td>2</td><td>0</td></tr> <tr><td colspan="4"><hr/></td></tr> <tr><td>8</td><td>3</td><td>0</td><td></td></tr> </table>	Th	H	T	O	1	2	5	0	-	4	2	0	<hr/>							0	Th	H	T	O	1	2	5	0	-	4	2	0	<hr/>						3	0	Th	H	T	O	1	2	5	0	-	4	2	0	<hr/>				8	3	0		Th	H	T	O	1	2	5	0	-	4	2	0	<hr/>				8	3	0	
Th	H	T	O																																																																																
1	2	5	0																																																																																
-	4	2	0																																																																																
<hr/>																																																																																			
			0																																																																																
Th	H	T	O																																																																																
1	2	5	0																																																																																
-	4	2	0																																																																																
<hr/>																																																																																			
		3	0																																																																																
Th	H	T	O																																																																																
1	2	5	0																																																																																
-	4	2	0																																																																																
<hr/>																																																																																			
8	3	0																																																																																	
Th	H	T	O																																																																																
1	2	5	0																																																																																
-	4	2	0																																																																																
<hr/>																																																																																			
8	3	0																																																																																	
<p>Column subtraction with exchange across more than one column</p>	<p>Understand why two exchanges may be necessary.</p> <p>$2,502 - 243 = ?$</p>   <p><i>I need to exchange a 10 for some 1s, but there are not any 10s here.</i></p>	<p>Make exchanges across more than one column where there is a zero as a place holder.</p> <p>$2,502 - 243 = ?$</p>  	<p>Make exchanges across more than one column where there is a zero as a place holder.</p> <p>$2,502 - 243 = ?$</p>																																																																																

			<table style="margin-bottom: 10px;"> <tr><td>Th</td><td>H</td><td>T</td><td>O</td></tr> <tr><td>2</td><td>4</td><td>0</td><td>2</td></tr> <tr><td>-</td><td>2</td><td>4</td><td>3</td></tr> <tr><td colspan="4"><hr/></td></tr> </table> <table style="margin-bottom: 10px;"> <tr><td>Th</td><td>H</td><td>T</td><td>O</td></tr> <tr><td>2</td><td>4</td><td>9</td><td>12</td></tr> <tr><td>-</td><td>2</td><td>4</td><td>3</td></tr> <tr><td colspan="4"><hr/></td></tr> </table> <table> <tr><td>Th</td><td>H</td><td>T</td><td>O</td></tr> <tr><td>2</td><td>4</td><td>9</td><td>12</td></tr> <tr><td>-</td><td>2</td><td>4</td><td>3</td></tr> <tr><td colspan="4"><hr/></td></tr> <tr><td>2</td><td>2</td><td>5</td><td>9</td></tr> </table>	Th	H	T	O	2	4	0	2	-	2	4	3	<hr/>				Th	H	T	O	2	4	9	12	-	2	4	3	<hr/>				Th	H	T	O	2	4	9	12	-	2	4	3	<hr/>				2	2	5	9																
Th	H	T	O																																																																				
2	4	0	2																																																																				
-	2	4	3																																																																				
<hr/>																																																																							
Th	H	T	O																																																																				
2	4	9	12																																																																				
-	2	4	3																																																																				
<hr/>																																																																							
Th	H	T	O																																																																				
2	4	9	12																																																																				
-	2	4	3																																																																				
<hr/>																																																																							
2	2	5	9																																																																				
<p>Representing subtractions and checking strategies</p>		<p>Use bar models to represent subtractions where a part needs to be calculated.</p> <table style="margin: 0 auto; text-align: center;"> <tr><td colspan="2">Total 5,762</td></tr> <tr><td colspan="2">┌───────────┐</td></tr> <tr><td colspan="2">│</td></tr> <tr><td>┌───┐</td><td>┌───┐</td></tr> <tr><td>│</td><td>│</td></tr> <tr><td>└───┘</td><td>└───┘</td></tr> <tr><td>?</td><td>2,899</td></tr> <tr><td>Yes votes</td><td>No votes</td></tr> </table> <p><i>I can work out the total number of Yes votes using $5,762 - 2,899$.</i></p> <p>Bar models can also represent 'find the difference' as a subtraction problem.</p> <table style="margin: 0 auto;"> <tr><td>Danny</td><td>┌───┐</td><td>← ?</td></tr> <tr><td></td><td>899</td><td>→</td></tr> <tr><td>Luis</td><td>┌───┐</td><td></td></tr> <tr><td></td><td>1,005</td><td></td></tr> </table>	Total 5,762		┌───────────┐		│		┌───┐	┌───┐	│	│	└───┘	└───┘	?	2,899	Yes votes	No votes	Danny	┌───┐	← ?		899	→	Luis	┌───┐			1,005		<p>Use inverse operations to check subtractions.</p> <p><i>I calculated $1,225 - 799 = 574$. I will check by adding the parts.</i></p> <table style="margin: 0 auto;"> <tr><td colspan="2">┌───┐</td></tr> <tr><td colspan="2">1,225</td></tr> <tr><td colspan="2">└───┘</td></tr> <tr><td>┌───┐</td><td>┌───┐</td></tr> <tr><td>799</td><td>574</td></tr> <tr><td colspan="2">└───┘</td></tr> </table> <table style="margin: 0 auto; text-align: center;"> <tr><td>Th</td><td>H</td><td>T</td><td>O</td></tr> <tr><td>7</td><td>9</td><td>9</td><td></td></tr> <tr><td>+</td><td>5</td><td>7</td><td>4</td></tr> <tr><td colspan="4"><hr/></td></tr> <tr><td>1</td><td>3</td><td>7</td><td>3</td></tr> <tr><td colspan="4"><hr/></td></tr> <tr><td></td><td></td><td></td><td></td></tr> </table> <p><i>The parts do not add to make 1,225. I must have made a mistake.</i></p>	┌───┐		1,225		└───┘		┌───┐	┌───┐	799	574	└───┘		Th	H	T	O	7	9	9		+	5	7	4	<hr/>				1	3	7	3	<hr/>							
Total 5,762																																																																							
┌───────────┐																																																																							
│																																																																							
┌───┐	┌───┐																																																																						
│	│																																																																						
└───┘	└───┘																																																																						
?	2,899																																																																						
Yes votes	No votes																																																																						
Danny	┌───┐	← ?																																																																					
	899	→																																																																					
Luis	┌───┐																																																																						
	1,005																																																																						
┌───┐																																																																							
1,225																																																																							
└───┘																																																																							
┌───┐	┌───┐																																																																						
799	574																																																																						
└───┘																																																																							
Th	H	T	O																																																																				
7	9	9																																																																					
+	5	7	4																																																																				
<hr/>																																																																							
1	3	7	3																																																																				
<hr/>																																																																							