

# In maths we are learning about...



Addition and Subtraction		Knowledge Organiser	
Key Vocabulary	Addition and Subtraction Methods		
Add	<b>Add 4-digit numbers</b>	<b>Subtract 4-digit numbers</b>	
Total	No exchange	No exchange	
Plus	5162	5789	
Sum	+3427	- 3421	
More	<u>8589</u>	<u>2368</u>	
Altogether	Starting with the ones, add each column in turn.	Starting with the ones, subtract each column in turn.	
Difference	One exchange	One exchange	
Subtract	5162	6 1	
Less	+3497	5749	
Minus	<u>8659</u>	- 3471	
Take away	1	<u>2278</u>	
Mentally, Orally	Starting with the ones, add each column in turn. When adding 6 tens + 9 tens = 15 tens = 1 hundred + 5 tens	Starting with the ones, subtract each column in turn. When subtracting 4 tens - 7 tens, exchange 1 hundred to make:	
Column Addition	Place 1 hundred under the hundreds answer and 5 tens in the answer.	14 tens - 7 tens = 7 tens	
Column Subtraction	Multiple exchanges	Multiple exchanges	
Exchange	5864	6 131	
Estimate	+3497	5742	
Inverse operation	<u>9361</u>	- 3476	
Solve problems	111	<u>2266</u>	
Number facts	Starting with the ones, add each column in turn. Exchange tens, hundreds and/ or thousands as required.	Starting with the ones, subtract each column in turn. Exchange tens, hundreds and/ or thousands as required.	
	<b>Efficient subtraction</b>		
	<p>Calculate <math>6000 - 3617 = 2383</math></p>		

Addition and Subtraction		Knowledge Organiser									
Add and Subtract 1s, 10s, 100s, 1000s	Round to Estimate										
<p><b>Here is the number 3124</b></p> <p>Add 2 thousands = 5124 Add 5 hundreds = 5624 Subtract 2 tens = 5604 Add 5 ones = 5609</p> <p><b>Here is the number 6708</b></p> <table border="1"> <thead> <tr> <th>Thousands</th> <th>Hundreds</th> <th>Tens</th> <th>Ones</th> </tr> </thead> <tbody> <tr> <td>6</td> <td>7</td> <td>0</td> <td>8</td> </tr> </tbody> </table> <p>Add 3 thousands = 9708 Subtract 4 hundreds = 9308 Add 5 tens = 9358 Subtract 7 ones = 9351</p> <p><b>Crossing ones, tens or hundreds</b></p> <p>5392 + 4 tens = 5432      crossing tens 5126 - 600 = 4526      crossing hundreds</p> <p>When crossing ones, tens or hundreds, more than one digit will change.</p>	Thousands	Hundreds	Tens	Ones	6	7	0	8	<p>1635 + 386 = 2021 Round to the nearest ten</p> <p>1640 + 390 = 2030 Round to the nearest hundred</p> <p>1600 + 400 = 2000</p> <p>Both give a reasonable estimate, but rounding the nearest ten is more accurate.</p>	<p>9362 - 5729 = 3622 Round to the nearest hundred</p> <p>9400 - 5700 = 3700 Round to the nearest thousand</p> <p>9000 - 6000 = 3000</p> <p>Rounding to the nearest hundred is much more accurate in this case.</p>	
Thousands	Hundreds	Tens	Ones								
6	7	0	8								
	<b>Checking Strategies</b>										
<p><b>Using Inverse</b></p> <p>3476 - 744 = 2732 can be checked using 2732 + 744 = 3476</p> <p>This part whole shows the inverse calculations using these three numbers.</p> <table border="1"> <tbody> <tr> <td>1549 + 2688 = 4237</td> <td>2688 + 1549 = 4237</td> </tr> <tr> <td>4237 - 1549 = 2688</td> <td>4237 - 2688 = 1549</td> </tr> </tbody> </table>	1549 + 2688 = 4237	2688 + 1549 = 4237	4237 - 1549 = 2688	4237 - 2688 = 1549	<p><b>Adding in a different order</b></p> <p>420 + 372 + 280 =</p> <p><b>Change to</b></p> <p>420 + 280 + 372 =</p> <p>As 420 + 280 = 700 (because 42 + 28 = 70)</p> <p>420 + 280 + 372 = 700 + 372 = 1072</p>						
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