



In maths we are learning about...

Addition and Subtraction	Knowledge Organiser																																																		
Key Vocabulary	Addition and Subtraction Methods																																																		
<p>add</p> <p>total</p> <p>plus</p> <p>sum</p> <p>more</p> <p>altogether</p> <p>difference</p> <p>subtract</p> <p>less</p> <p>minus</p> <p>take away</p> <p>column addition</p> <p>column subtraction</p> <p>exchange</p> <p>estimate</p> <p>inverse operation</p> <p>solve problems</p> <p>number facts</p> <p>place value</p>	<p>3-digit and 1-digit numbers</p> <p>Not crossing 10s</p> $268 - 4 = 264$ <table border="1" style="width: 100%; text-align: center; border-collapse: collapse;"> <tr style="background-color: #f4a460;"> <th>Hundred</th> <th>Ten</th> <th>Ones</th> </tr> <tr> <td>●●</td> <td>●●●●</td> <td>●●●●●●</td> </tr> </table> $343 + 6 = 349$  <p>Crossing 10s (Exchanging)</p> <table border="1" style="width: 100%; text-align: center; border-collapse: collapse;"> <tr style="background-color: #f4a460;"> <th colspan="3">324</th> </tr> <tr style="background-color: #90ee90;"> <td>300</td> <td>20</td> <td>4</td> </tr> <tr style="background-color: #90ee90;"> <td>300</td> <td>10</td> <td>14</td> </tr> </table> $316 + 8 = 324$ <table border="1" style="width: 100%; text-align: center; border-collapse: collapse;"> <tr> <td style="width: 80%;">316</td> <td style="width: 20%;">8</td> </tr> </table> $324 - 8 = 316$	Hundred	Ten	Ones	●●	●●●●	●●●●●●	324			300	20	4	300	10	14	316	8	<p>3-digit and 2-digit numbers</p> <p>Add and subtract tens</p> <table border="1" style="width: 100%; text-align: center; border-collapse: collapse;"> <tr style="background-color: #f4a460;"> <th>Hundred</th> <th>Ten</th> <th>Ones</th> </tr> <tr> <td>●●●</td> <td>●●●●</td> <td>●</td> </tr> </table> $451 + 3 \text{ tens} = 481 \quad (5 + 3 = 8)$ $451 - 4 \text{ tens} = 411 \quad (5 - 4 = 1)$ <p>Crossing 10s (Exchanging)</p> <p>$258 + 80 = 338$</p> <ul style="list-style-type: none"> Column method Count in 10s mentally Add 100, subtract 20 <p>Crossing 10 and 100</p> $\begin{array}{r} 368 \\ +73 \\ \hline 441 \end{array}$ $\begin{array}{r} 368 \\ +73 \\ \hline 441 \end{array}$ $\begin{array}{r} 368 \\ +73 \\ \hline 441 \end{array}$ $\begin{array}{r} 31 \\ 441 \\ -73 \\ \hline 368 \end{array}$ $\begin{array}{r} 31 \\ 441 \\ -73 \\ \hline 368 \end{array}$ $\begin{array}{r} 31 \\ 441 \\ -73 \\ \hline 368 \end{array}$	Hundred	Ten	Ones	●●●	●●●●	●	<p>3-digit numbers</p> <p>Not crossing</p> $679 - 351 = 328$ <table border="1" style="width: 100%; text-align: center; border-collapse: collapse;"> <tr style="background-color: #f4a460;"> <th>Hundred</th> <th>Ten</th> <th>Ones</th> </tr> <tr> <td>●●●</td> <td>●●●</td> <td>●●●</td> </tr> </table> <p>Crossing 10s (Exchanging)</p> <table border="1" style="width: 100%; text-align: center; border-collapse: collapse;"> <tr> <td style="width: 30%;">?</td> <td style="width: 30%;">269</td> <td style="width: 40%;"></td> </tr> <tr> <td>154</td> <td>269</td> <td></td> </tr> </table> $\begin{array}{r} 269 \\ +154 \\ \hline 423 \\ \hline 11 \end{array}$ <table border="1" style="width: 100%; text-align: center; border-collapse: collapse;"> <tr> <td style="width: 50%;">514</td> <td style="width: 50%;"></td> </tr> <tr> <td>268</td> <td>?</td> </tr> </table> $\begin{array}{r} 4101 \\ 514 \\ -268 \\ \hline 246 \end{array}$ <p>Add and Subtract 100s</p> $284 + 300 = 584$ <table border="1" style="width: 100%; text-align: center; border-collapse: collapse;"> <tr style="background-color: #f4a460;"> <th>Hundred</th> <th>Ten</th> <th>Ones</th> </tr> <tr> <td>●●●</td> <td>●●●</td> <td>●</td> </tr> <tr> <td>●●●</td> <td>●●●</td> <td>●</td> </tr> </table>	Hundred	Ten	Ones	●●●	●●●	●●●	?	269		154	269		514		268	?	Hundred	Ten	Ones	●●●	●●●	●	●●●	●●●	●
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Estimate	Check Answers																							
<p>Estimate by dividing the hundred into 250 and 225.</p> <p>Estimate 10s (330, 340) between 325 and 350.</p>  <p>Estimate $167 - 89$</p> <p>Use near numbers $170 - 90 = 80$</p> <p>Near numbers:</p> <table style="width: 100%; text-align: center;"> <tr> <td style="background-color: #008080; color: white; padding: 5px;">413</td> <td style="background-color: #008080; color: white; padding: 5px;">279</td> <td style="background-color: #008080; color: white; padding: 5px;">521</td> <td style="background-color: #008080; color: white; padding: 5px;">782</td> </tr> <tr> <td style="background-color: #90ee90; padding: 5px;">↓</td> <td style="background-color: #90ee90; padding: 5px;">↓</td> <td style="background-color: #90ee90; padding: 5px;">↓</td> <td style="background-color: #90ee90; padding: 5px;">↓</td> </tr> <tr> <td style="background-color: #90ee90; padding: 5px;">400</td> <td style="background-color: #90ee90; padding: 5px;">300</td> <td style="background-color: #90ee90; padding: 5px;">500</td> <td style="background-color: #90ee90; padding: 5px;">800</td> </tr> </table>	413	279	521	782	↓	↓	↓	↓	400	300	500	800	<table border="1" style="width: 100%; text-align: center; border-collapse: collapse;"> <tr style="background-color: #add8e6;"> <td colspan="2">347</td> </tr> <tr> <td style="background-color: #9370db;">273</td> <td style="background-color: #90ee90;">74</td> </tr> </table> <p>$347 - 74 = 273$ can be checked using</p> <p>$273 + 74 = 347$</p> <p>This part whole shows the inverse calculations using these three numbers.</p> <table border="1" style="width: 100%; text-align: center; border-collapse: collapse;"> <tr> <td style="width: 30%;">423</td> <td style="width: 35%;">154</td> <td style="width: 35%;">269</td> </tr> </table> <table border="1" style="width: 100%; text-align: center; border-collapse: collapse;"> <tr> <td style="width: 50%;">$154 + 269 = 423$</td> <td style="width: 50%;">$269 + 154 = 423$</td> </tr> <tr> <td style="width: 50%;">$423 - 154 = 269$</td> <td style="width: 50%;">$423 - 269 = 154$</td> </tr> </table>	347		273	74	423	154	269	$154 + 269 = 423$	$269 + 154 = 423$	$423 - 154 = 269$	$423 - 269 = 154$
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