

## Column addition lesson plan

DAY	We Are Learning To (WALT):	MODEL / INTRODUCTION	INDEPENDENT WORK	PLENARY																																	
	<p>Mental:</p> <p>Main: Use column addition (without partitioning)</p>	<p>Mental:</p> <p>Main: TA to take children who are unable to add a 1-digit number to a 2-digit number (e.g. 47 + 8) and / or are unable to add multiples of 10 (e.g. 40 + 20) Practice counting up to 100, especially focusing on crossing tens barriers Practice counting up to 100 in tens Calculate mentally by putting first number in head and counting on, using fingers to keep count Work on setting these questions out in columns and calculating them mentally</p> <p>Go through PowerPoint with the following:</p> <ul style="list-style-type: none"> <li>• Revise what column and vertical mean</li> <li>• Revise 4 key teaching points (see below)</li> <li>• Explanation of how when the units column is full i.e. has 10 units in it, these 10 units need to move next door to the tens and become 1 ten, with several examples</li> <li>• Go through examples of how to add 2-digit and 3-digit numbers e.g.</li> </ul> <table border="1" style="margin-left: 20px;"> <tr> <td>1)</td><td>4</td><td>7</td><td>2)</td><td>2</td><td>3</td><td>9</td> </tr> <tr> <td></td><td>+</td><td>2</td><td>5</td><td></td><td>+</td><td>5</td><td>2</td> </tr> <tr> <td></td><td></td><td>7</td><td>2</td><td></td><td></td><td>2</td><td>9</td><td>1</td> </tr> <tr> <td></td><td></td><td>1</td><td></td><td></td><td></td><td></td><td>1</td><td></td> </tr> </table> <p>(With every example reinforce four main teaching points:</p> <ul style="list-style-type: none"> <li>➤ Start on the right-hand side</li> <li>➤ Put only 1 number in a square</li> <li>➤ Write the +</li> <li>➤ Put units under units and tens under tens and so on</li> <li>➤ Putting the 1 you carry in the correct column</li> </ul> <p>Middle and higher ability start work go to stick success criteria in books</p> <ul style="list-style-type: none"> <li>• Model for G+T how to use column addition with number with decimal places</li> </ul> <p>Remind children to leave space between calculations and not squash them together Have a copy of the success criteria to stick at the top of their page on each child's desk (except for lower ability as they do not need to think about all of the criteria)</p>	1)	4	7	2)	2	3	9		+	2	5		+	5	2			7	2			2	9	1			1					1		<p>(At regular intervals have children stop and check their work against success criteria)</p> <p>Lower ability – add 1-digit numbers to 2-digit numbers (give number line if really cannot work without it)</p> <p>Middle ability – add 2-digit numbers (with carrying)</p> <p>Higher ability – add 3-digit numbers (with carrying)</p> <p>Extension – add 4-digit numbers and numbers with decimal places (with carrying)</p>	<p>Have children self-assess their work against the success criteria In ability partners give children 1 question to do each Children need to talk to their partner, explaining what they are doing e.g. I will put the 6 under the 4 because they are both units. Then I will put the 40 under the 20 because they are both tens. Then I draw my equals line with a ruler. Then I start on the right and add the units first, carrying a ten and writing it under the tens, and then add the tens Children swap over and partner who spoke first now listen</p>
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