

Column subtraction (with borrowing) lesson plan

DAY	We Are Learning To (WALT):	MODEL / INTRODUCTION	INDEPENDENT WORK	PLENARY																																								
	<p>Mental:</p> <p>Main: Use column subtraction (with borrowing)</p>	<p>Mental:</p> <p>Main: Go through PowerPoint with the following:</p> <ul style="list-style-type: none"> • Revise what column and vertical mean • Revise 4 key teaching points (see below) • Explanation of how when the bottom number in a column is larger than the top number, you need to take a ten / hundred / thousand from the next column to the left, with several examples • Go through examples of how to subtract 1-digit numbers. Lower ability start work • Go through examples of how to subtract 2-digit and 3-digit numbers e.g. <table border="1" style="margin-left: 40px;"> <tr> <td></td><td></td><td style="text-align: center;">3</td><td></td><td></td><td></td><td></td><td style="text-align: center;">7</td><td></td><td></td> </tr> <tr> <td>1)</td><td></td><td style="text-align: center;">4¹</td><td style="text-align: center;">2</td><td>2)</td><td></td><td style="text-align: center;">2</td><td style="text-align: center;">8¹</td><td style="text-align: center;">2</td><td></td> </tr> <tr> <td></td><td style="text-align: center;">-</td><td style="text-align: center;">2</td><td style="text-align: center;">5</td><td></td><td style="text-align: center;">-</td><td style="text-align: center;">5</td><td style="text-align: center;">7</td><td></td><td></td> </tr> <tr> <td></td><td></td><td style="text-align: center;">1</td><td style="text-align: center;">8</td><td></td><td></td><td style="text-align: center;">2</td><td style="text-align: center;">2</td><td style="text-align: center;">5</td><td></td> </tr> </table> <p>(With every example reinforce four main teaching points:</p> <ul style="list-style-type: none"> ➤ Start on the right-hand side ➤ Put only 1 number in a square ➤ Write the - ➤ Put units under units and tens under tens and so on ➤ Cross out the number you take from and write its replacement above it <ul style="list-style-type: none"> • Middle and higher ability start work • Model for G+T how to use column subtraction with numbers to 1 decimal place • Final slide with reminders of the 5 key points above. Print out and enlarge / leave copies on tables of this final slide <p>Remind children to leave space between calculations and not squash them together Give children a copy of the success criteria to stick at the top of their page</p>			3					7			1)		4 ¹	2	2)		2	8 ¹	2			-	2	5		-	5	7					1	8			2	2	5		<p>Children who were insecure on column subtraction without borrowing to repeat previous lesson on column subtraction without borrowing</p> <p>(At regular intervals have children stop and check their work against the success criteria)</p> <p>Lower ability – subtract 1-digit numbers and multiples of 10 (children who work slowly to work on sheet) Give unit square and tens sticks if needed</p> <p>Middle ability – subtract 2-digit numbers (with borrowing)</p> <p>Higher ability – subtract 3-digit numbers (with borrowing)</p> <p>Extension – subtract 4-digit numbers and numbers to 1 decimal place (with borrowing)</p>	<p>Have children self-asses their work against the success criteria In ability partners give children 2 questions per pair, one for each partner Children need to talk to their partner, explaining what they are doing e.g. I will put the 3 under the other 3 because they are both units, then I draw my equals line with a ruler and use my fingers to calculate the answer Children swap over and partner who spoke first now listens</p>
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