

Column subtraction (with zeros in top numbers) lesson plan

DAY	We Are Learning To (WALT):	MODEL / INTRODUCTION	INDEPENDENT WORK	PLENARY
	<p>Mental:</p> <p>Main: Use column subtraction</p>	<p>Mental:</p> <p>Main: TA to take children who were insecure on column subtraction in previous lesson, in which the top numbers never had zeros Revise teaching points from this lesson and go through corrections and some more examples</p> <p>Go through PowerPoint with the following:</p> <ul style="list-style-type: none"> • Revise what column and vertical mean • Revise 5 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 of numbers with a top number containing a zero • Go through examples of how to subtract 2-digit and 3-digit numbers by going to the next column to the left to borrow to replace the zero e.g. (With every example reinforce main teaching points: <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 ➤ Go to the next column to replace the zero. Do not swap the numbers around <p>Middle and higher ability start work go to stick success criteria in books</p> <ul style="list-style-type: none"> • Model for G+T how to use column subtraction with number with decimal places where writing in the decimal point followed by some zeros is helpful e.g. $7 - 1.65$ <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>	<p>(At regular intervals have children stop and check their work against the success criteria)</p> <p>Lower ability – subtract 1-digit numbers from 2-digit numbers (give number line if really needed)</p> <p>Middle ability – subtract 2-digit numbers (with a zero in the top number)</p> <p>Higher ability – subtract 3-digit numbers (with a zero in the top number)</p> <p>Extension – subtract 4-digit numbers and numbers with decimal places (with a zero in the top number)</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 (because they are bc units. Then I will put the 20 under the 40 because they are bc tens. Then I draw my equals line with a ruler. Then I start on the right and subtract the units first, borrowing a ten. I cross out the old ten number and write the new number in the tens, and then I subtract the tens Children swap over and partner who spoke first now listen</p>