

## Adding and subtracting using a hundred square

DAY	We Are Learning To (WALT):	MODEL / INTRODUCTION	INDEPENDENT WORK	PLENARY
	<p>Mental:</p> <p>Main: Add and subtract using a hundred square</p>	<p>Mental:</p> <p>Main: TA to take children who are unable to find one more / less than another number. If unsure if some children can do this / get confused between more / less, ask them to do a couple of examples quickly to find out. TA to model for children how to find one more / less than a number on a number line Emphasise how when we add <b>more</b> we move forward / up the number line, whereas when we find <b>less</b> we move back / down the number line Once children are confident with this, model how to find one more / less than a number mentally, by putting the number in their heads (pretend to push it in to your head) and counting on / back one Teacher (with remainder of class) Explain that we will be working on using a hundred square and not getting confused between more / less Revise sayings and actions of:</p> <ul style="list-style-type: none"> <li>• To add one <b>more</b> (put one finger up), we move forward (point to the side)</li> <li>• To find one <b>less</b> (put one finger up), we move forward (point to the side)</li> <li>• To add ten <b>more</b> (put ten fingers up), we move down a row (point down)</li> <li>• To find ten <b>less</b> (put ten fingers up), we move up a row (point up)</li> </ul> <p>Revise how to find ten more / less or one more / less than a number on a hundred square using this method, reinforcing the sayings above, emphasising which direction to move and how we add ten by only changing the tens number (At this point you may get middle ability children to begin their independent work) Revise for higher ability children how to use a hundred square to add and subtract multiples of ten and 2-digit numbers To add / subtract multiples of 10 you need to see how many tens there are and move down / up this many rows e.g. to calculate <math>30 + 40</math>, there are 4 tens in 40 so you need to start on 30 and move down 4 rows to get to 70. To add / subtract 2 digit numbers you need to first move down / up however many tens there are and then forward / backward how many units e.g. to calculate <math>30 + 56</math> there are five tens so you move down five rows and there are six units so then you move forward six spaces. Cover examples where you need to cross a 'tens barrier' e.g. <math>48 + 26</math> and model how to move back to the beginning of the next row down when you reach the end of a row e.g. when you get to 50, to count on one more you move down and back to 51. Emphasise need to check whether a question is more / less or add / subtract (Higher ability start work) Model for G+T how to add and subtract multiples of 100 by only changing the numbers in the hundreds column, similar to how we add multiples of 10 by only changing the numbers in the tens column Model how to add and subtract 3-digit numbers by adding / subtracting the hundreds, then the tens and then the units</p>	<p>Lower ability – find one more / less than a number</p> <p>Middle ability – find one more / less or ten more / less than a number on a hundred square</p> <p>Higher ability – add and subtract 2-digit numbers</p> <p>Gifted and talented – add and subtract 3-digit numbers (with base ten materials if needed)</p> <p>Extension – make up some of their own number sentences to calculate</p>	<p>Revise sayings and actions from introduction. In ability partners give children 2 questions per pair, one for each partner. Children need to talk to their partner, explaining why they are using the method that they are using e.g. moving down 4 rows to add 40 because there are 4 tens in forty.</p>