

Finding one or ten more and adding two-digit numbers lesson plan

Subject: Maths	Lesson Title: Finding one or ten more and adding two-digit numbers
Date:	Time Span:
Year Group: Year 2	Group Size: 30

Desired Learning Outcomes

To be able to find one more than a given number

To be able to add a multiple of ten / 2-digit number using a hundred square

Key Language:

More, add, plus, equals

Use of ICT:

Smartboard for introduction

Assessment (Make reference to each section of the lesson)

Intro – TA to check children who may / may not be able to find one more than a number.

Main – Mark children's work as they complete it. Sit with any children who are struggling, bringing them back to the carpet if necessary. If still unsure by end of lesson sit with TA during plenary.

Plenary – Can children explain their working out and reasoning?

Use of Other Adults

TA to work with lower ability children during main part of lesson

TA to sit and continue working with children (of any ability) who struggled in plenary

Anticipated Misconceptions/Difficulties

Children moving the wrong direction on the hundred square

Children counting the number they start on as a 'jump' e.g. saying $20 + 20 = 30$ because they put their finger on the number 20 and count it as one jump of ten

Children not knowing what to do / moving incorrectly when they reach the end of a row e.g. they get to 50 and to count on one more move to the wrong place

Resources

Number lines available from <http://www.sparklebox.co.uk/2576-2580/sb2579.html#.UFmg1BgQmPo> (laminated and cut up)

Hundred squares (laminated and cut up)

Introduction	Time
<p>TA to take children who are unable to find one more than another number. If unsure if some children can do this, ask them to do a couple of examples quickly to find out. TA to model for children how to find one more than a number on a number line, by beginning on the first number and moving one space forward. Emphasise how when we add more we move forward / up the number line.</p> <p>Once children are confident with this, model how to find one more than a number mentally, by putting the number in their heads (pretend to push it in to your head) and counting on one</p> <p>Teacher (with remainder of class)</p> <p>Explain that we will be learning how to find 1 more or 10 more than a number. Model how to do this on a number line (exaggerate how slow it is and how long it takes to jump ten spaces)</p> <p>Introduce a hundred square, explaining how to count on one and how each row has ten numbers in it.</p> <p>Model how a hundred square allows us to add 10 more quickly (exaggerate how quickly) by just moving down a row. Ask children what they notice. What changes in the number? (only the digit in the tens column changes, but the digit in the units column stays the same when we move down a row i.e. add ten more)</p> <p>Teach children saying and actions of:</p> <ul style="list-style-type: none"> • To add one (put one finger up), we move forward (point to the side) • To add ten (put ten fingers up), we move down a row (point down) <p>Model how to find ten more or one more than a number using this method, reinforcing the saying above 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)</p> <p>Model for higher ability children how to use a hundred square to add multiples of ten and 2-digit numbers</p> <p>To add multiples of 10 you need to see how many tens there are and move down this many rows e.g. to calculate $30 + 40$, there are 4 tens in 40 so you need to start on 30 and move down 4 rows to get to 70.</p> <p>To add 2 digit numbers you need to first move down however many tens there are and then forward how many units e.g. to calculate $30 + 56$ there are five tens so you move down five rows and there are six units so then you move forward six spaces.</p> <p>Cover examples where you need to cross a 'tens barrier' e.g. $48 + 26$ 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.</p>	15 mins
<p>Main (including differentiated tasks)</p> <p>Lower ability – find one more than a number</p> <p>Middle ability – find one more or ten more than a number on a hundred square</p> <p>Higher ability – find multiples of ten more than a number e.g. $43 + 20$</p> <p>Gifted and talented – add two-digit numbers to a number e.g. $43 + 36$</p> <p>Extension – make up some of their own addition number sentences to calculate</p>	20 mins
<p>Plenary</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>	10 mins