

# Add two-digit numbers and tens

## National Curriculum attainment target

- Add numbers using concrete objects, pictorial representations, and mentally, including a two-digit number and tens

## Lesson objective

- Add two-digit numbers and tens

### Previous related lessons

Unit 2, Week 2, Lessons 1 & 2; Unit 5, Week 2, Lessons 1 & 2

### Prerequisites for learning

Pupils need to:

- recall addition facts to 20 with confidence
- identify the tens and ones digits in a two-digit number
- be confident in their use of Base 10 material and a 1–100 number square
- identify multiples of ten with confidence

### Vocabulary

ones (units), tens, addition, add, plus, more, make, total, altogether, equals, how many?, multiple

### Future related lessons

Unit 7, Week 1, Lessons 2 & 4; Unit 7, Week 2, Lessons 1 & 2

### Success criteria

Pupils can:

- recognise that the ones digit in a number does not change when a multiple of ten is added
- move down a column on a 1–100 number square to add multiples of ten



## Getting Started

- Choose an activity from Number – Addition and subtraction.
- Choose a game or activity from *Fluency in Number Facts: Y1/Y2 – Addition and subtraction*.

**i** The word 'ones' has been used throughout this lesson when referring to the least significant digit. However, children also need to be familiar with the word 'units'.

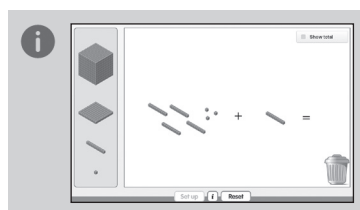


## Teach

### Resources

Base 10 material (per child); Resource 4: 1–100 number square (per child)

- Ask: **What is a multiple of ten?** (a number that is ten times larger than another number)  
Ask: **What is an easy way to spot a multiple of ten?** (all multiples of ten have zero ones)  
Say: **Give me some examples of multiples of ten.**
- Display the Base 10 tool and drag four tens and three ones onto the screen.
- Ask: **What number does this show?** (43)  
Say: **We're going to add one ten to 43.** Write an addition symbol on screen, drag one ten to the right of it and then write an equals symbol to the right of the one ten.
- Ask: **What is 43 plus ten?** (53) **How did you work out the answer?** There may be several different methods mentioned. Encourage children to try the method of finding the total number of tens and then the total number of ones to work out the answer. Help them to see that the number of ones in the answer is the same as in 43 and only the number of tens has changed.
- Repeat for  $39 + 30$  and  $26 + 50$ .
- Display: the Number Square tool and say: **This time we're going to use a number square to help us work out the answers rather than the Base 10 material.**
- Give each pair their own 1–100 number square and ask: **What is the answer to 37 add 20?** (57) **How did you use your number square to work out the answer?** Demonstrate using the Number Square tool. Highlight the starting number (37) using one of the colours available on the tool. Say: **I'm going to add one ten.** Point to the numbers (38, 39, 40, ..., 47) as you count to add on ten. As you reach ten, click and colour 47. Say: **There is one more ten in 47 than 37 but the ones have stayed the same.**



**Collins Connect**  
Year 2, Unit 7,  
Week 1



- Ask: **What do you notice about the position of the two numbers on the number square?** (one is above/below the other; they are in the same column)
- Ask: **What number do you think we'll reach if we add another ten?**
- Repeat counting on and pointing before clicking and colouring 57.
- Point to 37 followed by 47 and then 57. Say: **37 add ten add ten equals 57. 37 add 20 equals 57. The number of ones has stayed the same so the numbers are both in the same column in the number square.**
- Say: **To add ten to a number in a number square, jump to the number below in the same column.**
- Repeat for  $54 + 30$  and  $22 + 60$ . Encourage children to use their number squares to jump down the columns to work out the answers.

## Individualised Learning

Refer to Activities 1, 2 and 3 from the Learning activities on pages 294–5.

**Activity Book 2B:** – Page 26: Addition stars

Resources: Base 10 material (per child) (optional); Resource 4: 1–100 number square (per child)

**Progress Guide 2:** – Support, Year 2, Unit 7, Week 1, Lesson 1: Fish addition

## Plenary

### Resources

set of large 0–9 number cards (per class); two bags in which to hide the number cards (per class); sticky tack (per class); Resource 4: 1–100 number square (per child)

**i** There needs to be space on the board to end up with this arrangement of cards and symbols:

$$\square\square + \square 0 = ??$$

**i** If a 9 is drawn from the bag, it will have to be placed in the ones position in the first number.

- Stick the 0 card to the board then write + to the left of it and = to the right of it.
- Put the cards numbered 1 to 5 in one bag and the cards numbered 6 to 9 in the second bag.
- Invite a child to take two cards from the 1–5 bag and one card from 6–9 bag.
- Use sticky tack to arrange the cards on the board to make a number sentence of the form  $\square\square + \square 0 =$ , ensuring that the total will be less than 100.
- Children then answer the question (using a 1–100 number square for support, if needed).
- Agree the correct answer and write it on the board.
- Return the cards to the correct bags, wipe the answer off the board and repeat.