Subtract two-digit numbers and ones

National Curriculum attainment target

Lesson objective

- Subtract numbers using concrete objects, pictorial representations, and mentally, including a two-digit number and ones
- Subtract two-digit numbers and ones

Previous related lessons

Unit 2, Week 2, Lessons 1 & 2; Unit 5, Week 2, Lesson 1 **Prerequisites for learning**

Pupils need to:

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

Vocabulary

ones (units), tens, subtract, subtraction, minus, take away, leaves, how many (are left)?, total, equals

Future related lessons

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

Success criteria

Pupils can:

- use a 1–100 number square and number line to subtract ones from a two-digit number
- count back to subtract ones from a two-digit number
- accurately cross the tens boundary when subtracting ones from a two-digit number



This lesson uses two familiar models and images to teach children the concept of subtracting two-digit numbers and ones: the 1–100 number square and the 1-100 number line. Prior to teaching this lesson, teachers should decide whether it is appropriate to use both of these resources to teach this concept or only one and, if so, which resource.

Getting Started

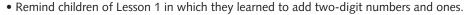
- Choose an activity from Number Addition and subtraction.
- Choose a game or activity from Fluency in Number Facts: Y1/Y2 Addition and subtraction.

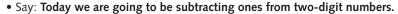
Collins Connect Year 2, Unit 5, Week 2

Teach

Resources

Resource 4: 1–100 number square (per child); Resource 68: 1–100 number line (per child)



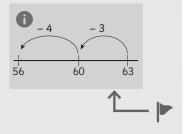


- Display: the Number Square tool and give each child their own 1–100 number square.
- Ask: How can you use your number square to work out the answer to 17 take away four?
- Highlight 17 on the number square. Invite a child to count back four to the left and highlight each of the numbers (16, 15, 14, 13) as they do.
- Ask: What is the answer to 17 minus four and how do you know? (13 the number that was reached after counting back 4; the last coloured number)
- Ask: What is seven less than 39? Use your number square to work out the answer.
- Say: Check your work with your partner.
- Invite a child to the board to demonstrate how they worked out the answer.
- Repeat for 56 5 and 88 3.
- Say: So far each answer has had the same number of tens as the question. Now we are going to answer questions that will need you to cross a tens boundary.
- Ask: What is 43 minus eight? Use your number square to work out the answer.
- Say: Check your work with your partner.
- Invite a child to the board to demonstrate how they worked out the answer.
- Draw children's attention to the need to move back to the previous row of the number square when crossing a tens boundary.
- Repeat for 62 6 and 94 9.
- Display: the Number Line tool and give each child their own 1–100 number line.









- Ask: How can you use your number line to work out the answer to 19 take away seven?
 Children's answers should demonstrate increased understanding from having already used the number squares.
- Use the Number Line tool to demonstrate counting back seven from 19. Invite a child to drag a snail marker to 19 and then count back seven, marking each jump to the left as they count.
- Ask: What is the answer to 19 subtract seven and how do you know? (12 the number that was reached after counting back seven; the number reached with the last jump)
- Repeat for 38 3, 57 5, 74 8 and 93 9.
- Use the example 63 7 to demonstrate that jumps don't always have to be individual numbers.
- Move a snail marker to 63 and draw one large jump to the left from 63 to 60. Ask: What number have I taken away with that jump? (3) Write 3 above the jump.
- Ask: How many more do we still need to take away to subtract seven in total? (four because three plus four equals seven) What is 60 take away four? (56) How do you know? If necessary remind children of previous work on subtracting ones from a multiple of ten. Draw a second jump from 60 to 56 and write 4 above it.
- Explain that taking away three and then taking away four is the same as taking away seven in one go because three plus four equals seven.
- Say: You can decide whether you prefer to use a number square or number line to help you in this lesson.

Individualised Learning

Refer to Activities 1 and 2 from the Learning activities on page 236.

Activity Book 2B: - Page 7: Subtraction detective

Resource: Resource 4: 1–100 number square

(per child)

- Extension, Year 2, Unit 5, Week 2, Lesson 2:

Progress Guide 2: Subtracting dice digits

Resource: 0-9 dice

Plenary

Resources

0-9 number fan (per child)

• Ask each child to select a one-digit number on their number fan. Invite three children to the front of the class with their fans and arrange them into a pair (the two-digit number) and a single child.



- Say: I would like the rest of you to subtract the one-digit number from the two-digit number, and show me the answer on your number fans. Invite children to reveal their answers. Check for any errors and identify the source of any confusion.
- Ask the three children to sit back down and say: **Everyone choose another one-digit number.** Choose three different children and arrange them as before.



- Ask: What is (say the two-digit number) take away (say the one-digit number)? Invite children to reveal their answers using their number fans.

 Once again, check for any errors and identify
- Repeat for further groups of three children.

the source of any confusion.



Homework Guide 2

Year 2, Unit 5, Week 2, Lesson 2: Carrot calculations