



Introduction

This series of four photocopiable books will provide an indispensable resource for use with those pupils who find it difficult to keep up with the learning objectives for the majority of pupils in their class or group. Using material written for a lower year group with these pupils can make it difficult to integrate their learning with that of the majority of the class. The material in this book enables you to give work at a lower level of difficulty in daily maths lessons.

You can use this book to provide alternative, and less demanding, tasks for less able pupils during the groupwork phase of the daily maths lesson. The work in each lesson is designed to support whole-class lesson objectives but to address them at a lower level. For the four books, the level of demand is as follows:

Book	Support for children in:	Level of work equivalent to:
1	Year 2–3	Year 1 or Year 2
2	Year 3–4	Year 2
3	Year 4–5	Year 3
4	Year 5–6	Year 4

It is assumed that all the pupils will take part, with support if necessary, in the whole-class introduction to the lesson before tackling the task from this book.

The teacher's notes will guide you in introducing the tasks to the pupils and in effective ways of working. These notes will help you, or a teaching assistant, to support pupils appropriately as they work.

Each task is supported by photocopiable pupil material in the form of activity sheets and, where appropriate, resource sheets that illustrate the steps to follow in completing a task. These are intended to provide additional support for the pupil, or, in some cases are to be used by a learning-support assistant where this is more appropriate. It is likely that pupils will need help in reading the instructions on the sheets. You may wish to cut the pupil sheets up or to add further examples of a particular type of task to meet the needs of individual pupils.

In addition to the photocopiable material, pupils will need ready access to aids such as number lines, hundred squares and counters.

Contents

Focus	Resources	Activity	Page
Place value	'Words and digits'	'Words and digits'	1–5
Mental calculation strategies – addition	'Splitting numbers'	'Splitting numbers'	6–8
Mental calculation strategies	'Doubles'	'Seeing double'	9–11
Subtraction	'Towers'	'Towers'	12–15
Subtraction	'Counting up'	'Counting up'	16–18
Capacity	'Half-empty or half-full?'	'How full?'	19–21
Capacity	'How much water?'	'How much water?'	22–24
Shape and space	'Two-dimensional shapes'	'Sorting shapes'	25–28
Shape and space – symmetry	'Line symmetry'	'Line symmetry'	29–32
3-D shapes	'Cube models and plans'	'Cube models' 'Cube plans'	33–36
Counting and properties of numbers	'Odds and evens'	'Odds and evens'	37–40
Counting and properties of numbers	'Adding odds and evens'	'Adding odds and evens'	41–44
Understanding multiplication	'Doubling'	'Doubling'	45–47
Understanding multiplication and division	'Sharing'	'Sharing into two'	48–51
Money and 'real-life' problems	'Coins'	'The right change'	52–54
Money and 'real-life' problems	'Look for a sign'	'Look for a sign'	55–57
Fractions	'Halves'	'Half as much'	58–60
Fractions	'Quarters'	'Quarters'	61–63
Understanding addition	'Counting up'	'Counting up'	64–66
Mental calculation strategies	'Take away'	'Take away'	67–69
Data handling	'Muddled numbers'	'Muddled numbers'	70–72
Data handling	'How many at home?'	'Who can hold the most?'	73–75
Place value	'Adding on ten'	'Adding on ten Hundred square'	76–79
Place value and ordering	'Adding on nine Hundred square'	'Adding on nine'	80–83
Understanding addition and calculation strategies	'Largest first'	'Largest first'	84–86
Understanding subtraction and calculation strategies	'Taking away ten'	'Taking away ten'	87–90
Understanding addition and calculation strategies	'Taking away nine'	'Taking away nine'	91–94
Money and 'real-life' problems	'How much change?'	'At the lolly shop (Methods A & B)'	95–98

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<i>Focus</i>	<i>Resources</i>	<i>Activity</i>	<i>Page</i>
Shape and space – position	'Grids'	'What's my position?'	99–101
Shape and space – position and direction	'Counter moves'	'Counter moves'	102–104
Time	'Clocks'	'What's the time?'	105–107
Time	'Digital clock'	'Digital time' 'Digital clocks'	108–112
Measures – mass	'How heavy?'	'Lighter or heavier?'	113–115
Measures – mass		'Measuring mass'	116–117
Counting and properties of numbers	'Number patterns'	'Number patterns'	118–120
Reasoning about numbers	'Patterns'	'Patterns'	121–123
Understanding addition	'Making 10'	'Making 20'	124–126
Understanding addition and subtraction	'Find the difference'	'Find the difference'	127–129
Understanding multiplication	'Arrays'	'How many lots of ...?'	130–132
Understanding division	'Sharing'	'Sharing between friends'	133–135
Fractions		'Halves and quarters'	136–139
Fractions	'Finding halves' 'Finding quarters'	'Finding halves and quarters'	140–143
Handling data	'Sorting lollies'	'Drawing a bar chart'	144–147
Handling data		'Lolly bar charts' 'Reading bar charts'	148–150
Estimation of numbers	'About how many ...?'	'What's your guess?' 'Estimating numbers (0–30)'	151–154
Calculation strategies for addition	'High fives'	'High fives'	155–157
Calculation strategies for subtraction	Counting up	'Counting up'	158–160
Written methods for addition		'Add on ten' 'Add on nine' 'Add on ten, take away one'	161–164
Written methods for subtraction		'Take away ten' 'Take away nine' 'Take away ten, then add one'	165–168
Length		'How long?'	169–170
Length		'How many centimetres?'	171–172
Shape and space	'Help the rabbit get to the carrot'	'Help the frog get to the pond'	173–175
Shape and space	'Names of shapes'	'Two-dimensional shapes'	176–178
'Real-life' problems		'How heavy?'	179–180

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<i>Focus</i>	<i>Resources</i>	<i>Activity</i>	<i>Page</i>
Counting and properties of numbers	'Multiples'	'Cube multiples'	181–184
Counting and properties of numbers	'Two by two'	'Counting in twos'	185–187
Understanding division	'Party cakes'	'Sharing cakes'	188–191
Developing mental strategies for multiplication and division	'Multiplication grid'	'Multiplying by 2, 5 and 10'	192–194
'Real-life' problems	'Different ways'	'How many different ways?'	195–197
Problem solving	'Dice rolls'	'Solving puzzles'	198–201
Fractions	'Thirds'	'Thirds'	202–204
Fractions		'Halves, quarters and thirds – which is biggest?'	205–206
Time	'Quarter hours'	'Quarter to or quarter past?' 'What's the time?'	207–210
Time	'Quarter hours and 15 minutes'	'Quarter hour displays' 'What time is it?'	211–214
Handling data	'Rosebank School'	'After-school clubs'	215–217
Handling data	'Merit marks'	'Displaying information'	218–220

Mental calculation strategies

Learning objectives

- Understand the operation of subtraction by using the process of counting up.

Resource

'Take away'

Activity

'Take away'

Teacher's notes

In this lesson pupils will be using the process of counting up to solve simple subtraction calculations.

Begin by referring back to the work carried out during the previous session when addition calculations were completed by counting up. Explain that the pupils will be doing the same thing during today's session but this time they will be subtracting numbers. Give pupils the resource 'Take away' and show them how to complete the subtraction $7 - 4 = ?$ by counting from four up to seven.

A useful rule for remembering how to do this is:

Start at the Second number and Finish at the First.

Pupils should now use cubes to complete the same calculation. 'Start with seven cubes and then take away four of them. How many cubes do you have left?' Emphasise that the same answer, three, was found using both methods.

Pupils should now move on to the activity 'Take away', using both the number line and cubes to complete each calculation.

Follow-up activities

- Pupils could make up their own subtraction calculations, using digit cards to generate their own sets of numbers. Point out that they will need to take the smaller number away from the larger one.

Answers

'Take away' page 69

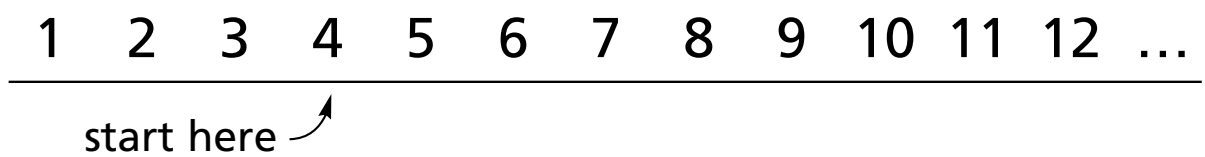
2. 4
3. 4
4. 4
5. 2
6. 12
7. 8
8. 8
9. 5
10. 8

Take away

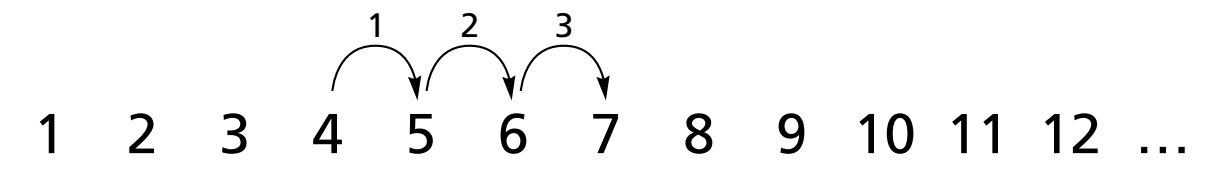
Resource

$$7 - 4 = \square$$

Step 1 Start at 4 on your number line.



Step 2 Count up in ones until you reach 7.



$$7 - 4 = 3$$

Name: _____

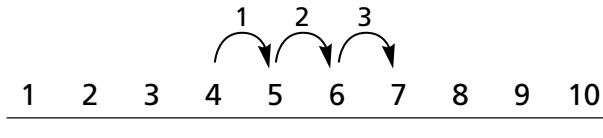
Date: _____

Take away

Activity

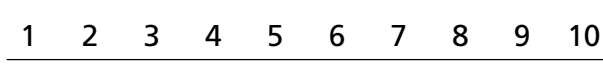
★ Use the number lines to complete the number sentences. The first one has been done for you.

1. $7 - 4 = \boxed{3}$



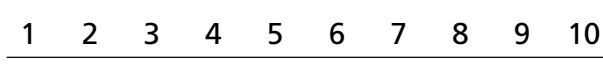
A number line from 1 to 10. Three curved arrows labeled 1, 2, and 3 are drawn above the line, starting at 4 and ending at 5, 6, and 7 respectively.

2. $6 - 2 = \boxed{}$



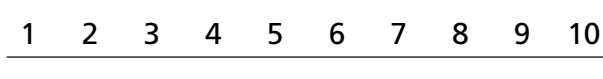
A number line from 1 to 10.

3. $9 - 5 = \boxed{}$



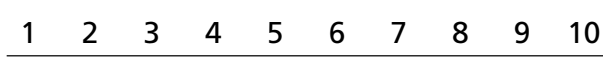
A number line from 1 to 10.

4. $8 - 4 = \boxed{}$



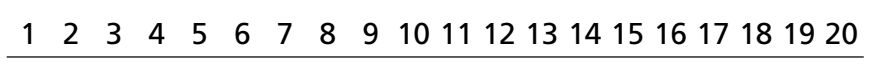
A number line from 1 to 10.

5. $5 - 3 = \boxed{}$



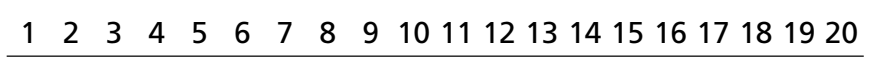
A number line from 1 to 10.

6. $18 - 6 = \boxed{}$



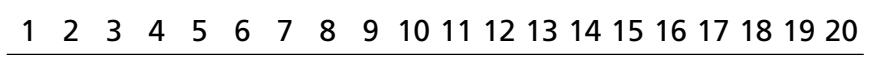
A number line from 1 to 20.

7. $14 - 6 = \boxed{}$



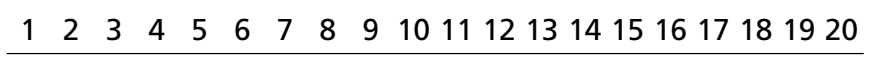
A number line from 1 to 20.

8. $13 - 5 = \boxed{}$



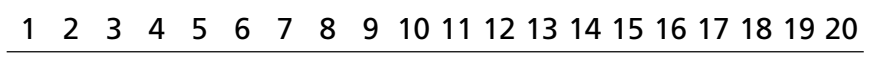
A number line from 1 to 20.

9. $12 - 7 = \boxed{}$



A number line from 1 to 20.

10. $17 - 9 = \boxed{}$



A number line from 1 to 20.

I can subtract by counting up.