

Problem Solving

Four Operations Consolidation – Year 6

National Curriculum Objectives

Mathematics Year 6: (6C3) [Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy](#)

Mathematics Year 6: (6C4) [Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why](#)

Mathematics Year 6: (6C5) [Identify common factors, common multiples and prime numbers](#)

Mathematics Year 6: (6C6) [Perform mental calculations, including with mixed operations and large numbers](#)

Mathematics Year 6: (6C7a) [Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication](#)

Mathematics Year 6: (6C7b) [Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context](#)

Mathematics Year 6: (6C7c) [Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context](#)

Mathematics Year 6: (6C8) [Solve problems involving addition, subtraction, multiplication and division](#)

Mathematics Year 6: (6C9) [Use their knowledge of the order of operations to carry out calculations involving the four operations](#)

About This Resource

This resource is aimed at Year 6 Expected and has been designed to give children the opportunity to consolidate the skills they have learned in Autumn Block 2 Four Operations.

The questions are based on a selection of the same ‘small steps’ that are addressed in the block, but are presented in a different way so children can work through the pack independently and demonstrate their understanding and skills.

Small Steps

Add and subtract whole numbers

Multiply up to a 4-digit by a 2-digit number

Short division

Long division

Mental calculations and estimation

Reasoning from known facts

More [Year 6 Four Operations](#) resources.

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It's the Women's Football Cup Final at the end of this month, and the stadium are getting ready to welcome the fans!

There's a lot of organisation needed to ensure the event is a success!

You have been assigned to help the management team so that the event runs smoothly.

The first thing to organise is the ticket sales. We know how many of each team's supporters have bought tickets, but we need to know the total number of tickets sold.

1a. London WFC sold 57,479 tickets and Leeds WFC sold 55,417 tickets. How many tickets were sold altogether?



1b. Many people lost out on buying tickets. If the total number of tickets sold was the total capacity of the stadium and 1,096,438 fans applied for tickets, how many people missed out on a ticket?

2a. The seats in the stadium are organised into 4 levels and each level has 4 sections. If each level has 28,224 seats, how many seats are in each section?



2b. Each section has 56 rows of seats. How many seats are in each row?

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3a. The shop at the stadium sells lots of merchandise.

The most popular items are the different team T-shirts. They sell 3,293 T-shirts at the match at £29 each. How much money do they make?

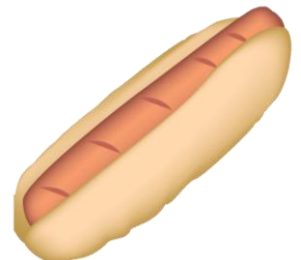
3b. The second most popular item is their hats. At the match, they sell 2,837 hats at £16 each. How much money do they make?

3c. The third most popular item is their foam fingers. At the match, they sell 1,925 foam fingers at £12 each. How much money do they make?

3d. If these three items were the only thing they sold, how much money did the shop make in total?

4. Not only does the stadium sell merchandise, it also sells food. There are a number of hotdog vendors moving around the stadium.

The vendors have said that they took in £6,378 in total. If the hot dogs they sell cost £6 each, how many hot dogs did they sell?



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5. The final task of the management team is to use the sales data to work out the amount of profit they made at the match. We have calculated the the ticket sales amounted to £5,987,744. Use this information and the outgoings information below to find the total amount of profit.

Outgoings:

Staffing = £1,285,329

Maintenance = £748,329

To calculate profit:

(shop sales + 5,987,744) – (1,285,329 + 748,329)



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- 1a. £112,896
- 1b. 983,542 people missed out on tickets
- 2a. 7,056 seats are in each section
- 2b. 126 seats are in each row
- 3a. £95,497
- 3b. £45,392
- 3c. £23,100
- 3d. £163,989
- 4. 1,063 hot dogs
- 5. £4,118,075