

Max's Market Challenge: Mastering Money

Learning objective: To solve multi-step problems involving addition, subtraction, multiplication, and division of money in the context of shopping.

Read each scenario carefully. Use your knowledge of decimal place value and arithmetic to calculate the totals. Show your working out clearly to ensure you have accounted for every penny.

Word bank: calculate · decimal · expenditure · remainder · total · unit price · budget · transaction

1. Max is buying ingredients for a school picnic. He buys 4 punnets of strawberries at £2.45 each and 3 bags of crisp apples at £1.80 each. Calculate the total cost of his shopping trip. If he pays with a £20 note, how much change should he receive? (3 marks)

2. Zara is buying art supplies. She finds a set of 6 paintbrushes for £13.50. What is the unit price of a single paintbrush? Justify your answer by showing the division method used. (2 marks)

3. Kit needs to purchase new components for a coding project. He has a budget of £50.00. He buys a sensor for £12.75, a battery pack for £8.40, and a pack of wires for £5.65. How much of his budget remains? Explain why it is important to track the running total during a shopping trip. (3 marks)

4. Leo is organising a poetry reading and needs to buy refreshments. He finds that 5 cartons of juice cost £7.50. If he needs to buy 12 cartons for the whole group, what is the total cost? Compare this to the cost of buying them individually at £1.75 per carton; which option is more economical? (4 marks)

5. Nova wants to buy a telescope lens that costs £84.60. She decides to save up by putting away £4.50 each week from her pocket money. How many weeks will it take for Nova to have enough money to buy the lens? (2 marks)

6. Imagine you are running a charity stall. You have £25.00 in your float. You sell 8 bookmarks at £1.25 each and 4 notebooks at £2.50 each. What is the new total amount of money in your cash box? Show your calculation. (3 marks)

Draw: Draw a display of items for sale at a market stall, each with a clearly labelled price tag. Include a small sign showing a 'special offer' deal using a multi-step pricing structure.



Extension challenge: What might happen if the price of fruit increased by 15% due to a poor harvest? Choose one item from Question 1 and calculate the new price. Justify your answer by explaining how this change would impact Max's total budget.