

Max's Market Challenge: The Great Calculation

Learning objective: To solve multi-step problems involving money, including calculating change, finding total costs, and comparing values using decimals.

Max the monkey has been helping at the local community market. He has listed the prices of various items below. Your task is to calculate the totals for the shoppers, determine the correct change from a £20 note, and justify the best value purchases. Show your working out clearly for every calculation.

Word bank: Total · Change · Difference · Decimal point · Value · Transaction · Expenditure · Budget

1. A shopper buys three punnets of strawberries at £2.45 each and a loaf of artisan bread for £3.10. What is the total cost of the shopping basket? (2 marks)

2. Using the total from the previous question, calculate the change the shopper should receive if they pay with a £20 note. Show your subtraction method. (2 marks)

3. Explain why it is important to align the decimal points when adding money values. What might happen if you forgot to do this? (3 marks)

4. Max sees that a bag of apples costs £4.20 for 6 apples, while another stall sells 4 apples for £2.60. Justify which option provides better value for money. Show your calculations. (4 marks)

5. A customer has a £15.00 budget. They want to buy a jar of honey for £4.75 and two jars of jam. If each jar of jam costs £2.85, do they have enough money? Prove your answer. (3 marks)

6. Compare and contrast the process of calculating change for a £10 note versus a £20 note. Does the method change? Explain your reasoning. (3 marks)

Draw: Draw a creative 'Market Stall' display for Max, including at least three items with prices clearly labelled in pounds and pence using decimals.



Extension challenge: Design your own shopping list of five items with different prices. Create a 'Greater Depth' word problem using these items that requires at least three steps to solve (e.g., involving a discount or multiple quantities), and provide the answer key for a partner to solve.