

Max's Market Stall Mental Maths Challenge

Learning objective: To improve mental calculation strategies for addition, subtraction, multiplication, and division involving money and multi-step problems.

Max the monkey is running a market stall selling fruit and stationery. Use your best mental maths strategies to solve the challenges below. Show your 'mental working out' in the space provided. For each calculation, explain the strategy you used (e.g., partitioning, rounding, or adjusting).

Word bank: partitioning · rounding · adjusting · inverse operations · factors · multiples · commutative property

1. Max sells bunches of bananas for £1.45. If a customer buys four bunches and pays with a £10 note, how much change should Max give back? Justify your choice of strategy. (2 marks)

2. A pack of notebooks costs £2.80. If the price increases by 50p, what is the new cost of three packs? Explain why you chose to add before or after multiplying. (2 marks)

3. Max has 84 stickers to share equally between 6 children. How many stickers does each child receive? If he found 6 more stickers, how would this change the calculation? (2 marks)

4. Compare and contrast the mental method you would use to calculate 19×7 versus 21×7 . Which is more efficient and why? (2 marks)

5. A customer buys items costing £3.99, £2.50, and £1.01. What is the total? Explain how 'adjusting' makes this calculation easier. (2 marks)

6. Max says, 'If I double the number of items and halve the price of each item, the total cost remains the same.' Is he correct? Justify your answer with an example. (2 marks)

Draw: Draw a small sketch of Max the monkey standing behind his market stall. Include labels for the prices of three different items (e.g., apples, pens, stickers) using decimal notation in pounds (£).



Extension challenge: Design your own 'Market Stall Challenge' involving at least three items and a multi-step operation. Write a word problem for a partner to solve, and include an answer key that shows two different mental maths methods to reach the same result.