Max’s Mathematical Market

Learning objective: To develop retrieval and inference skills while exploring complex mathematical problem-solving in a narrative context.

Read the text carefully and answer the questions below. Use evidence from the text to justify your answers where required.

Max the monkey stood behind his stall at the Great Forest Market, his brow furrowed in concentration. He was meticulously organising his inventory of exotic fruits. To Max, the market was not just a place for trade; it was a grand mathematical puzzle waiting to be solved. He had exactly £45.00 in his float to provide change for his customers. When a squirrel approached to purchase three bunches of golden bananas priced at £1.20 each, Max’s mind sprinted through the calculation. He recorded the transaction in his notebook, ensuring his budget remained balanced. As the sun began to dip behind the ancient oaks, Max tallied his earnings. He had sold twenty-two items, ranging from tangy passion fruits to sweet starberries. Despite the chaos of the bustling crowd, Max found tranquillity in the rhythm of his ledger. He checked his final total: £68.50. He smiled, satisfied that his meticulous tracking had prevented a single error throughout the busy day. For Max, the joy of the market was found not in the profit, but in the perfect balance of every single digit.

Word bank: meticulous · expenditure · inventory · budget · calculation · transaction

1. How much money did Max start with in his float at the beginning of the day? (1 mark)

2. How many items did Max sell in total throughout the day? (1 mark)

3. Why does Max describe the market as a 'grand mathematical puzzle' rather than just a place to sell fruit? (2 marks)

4. Explain why Max might have felt a sense of tranquillity while recording his transactions in his ledger. (2 marks)

5. Do you think Max enjoys his role as a stallholder? Justify your answer using evidence from the text. (3 marks)

Draw: Draw Max the monkey standing at his market stall. Include details of his notebook, his fruit inventory, and a sign showing the price of his produce in Australian dollars and cents.

Extension challenge: Max wants to introduce a loyalty discount where customers get £0.50 off if they spend over £5.00. Write a short paragraph explaining the impact this might have on his ledger. What might happen if he forgets to record this discount? Justify your reasoning.