Max’s Market Challenge: A Mental Maths Adventure

Learning objective: To apply mental calculation strategies, including partitioning, rounding, and adjusting, to solve real-world money problems involving pounds and pence.

Max the monkey is helping his friends shop at the local market. Using your best mental maths strategies, calculate the total cost of each basket or the change required. You must show your thinking for each. Do not use written column methods; explain how you used your mental maths skills (e.g., partitioning or rounding to the nearest pound).

Word bank: partitioning · rounding · adjusting · estimate · total · change · difference · sum

1. Pip buys a notebook for £2.45 and a fancy bookmark for £1.55. What is the total cost? Explain how you partitioned the numbers to add them mentally. (2 marks)

2. Nova wants to buy a telescope lens for £8.99. She pays with a £10.00 note. How much change should she receive? Justify your answer using the 'adjusting' method. (2 marks)

3. Zara is buying art supplies. She selects a set of brushes for £4.20 and a sketchbook for £3.85. Compare the total cost to £8.00. Is it more or less, and by how much? (2 marks)

4. Finn buys three packs of sea-themed stickers at £1.10 each. What is the total? Explain why multiplying by 3 is more efficient than adding the costs together. (2 marks)

5. Bea has £5.00. She wants to buy a jar of honey for £2.60 and a packet of wildflower seeds for £2.50. Does she have enough money? Explain why or why not. (2 marks)

6. What might happen if all items in the market increased in price by 10p? How would you mentally calculate the new total for Pip's original basket (from question 1)? (2 marks)

Draw: Draw a market stall scene featuring Max the monkey holding a sign that shows a mental maths trick, like 'Rounding to the nearest pound makes it easier!'

Extension challenge: Design your own market basket containing four different items with prices ending in various pence (e.g., £1.99, £3.45). Write a challenge for a partner to solve mentally, including an answer key that demonstrates your chosen mental strategy.