Max’s Market Challenge: Addition and Estimation

Learning objective: To add numbers with up to four digits using formal written methods and to use estimation to check answers as reasonable.

Max the monkey is helping at the local community market. Use your addition skills to help him calculate the total costs for his customers. Remember to line up your columns carefully (thousands, hundreds, tens, and ones). Always estimate your answer first to see if your final total is sensible.

Word bank: estimate · total · sum · column addition · calculate · reasonable · value · exchange

1. Max sold a crate of apples for £1,245 and a basket of pears for £2,586. Estimate the total cost by rounding to the nearest hundred, then calculate the exact sum. (3 marks)

2. Explain why it is important to check your answer using an estimation before moving to the next calculation. How does this help you spot mistakes? (2 marks)

3. A customer buys a bag of flour for £1,492 and a jar of honey for £3,658. Show your column addition working out below. Remember to carry your digits over when necessary. (3 marks)

4. Justify your answer for the previous question: How do you know your column addition is correct? Could you use a different method to verify the result? (2 marks)

5. Compare and contrast: What happens to your addition if you forget to include a 'place holder' zero when adding numbers with different amounts of digits? (3 marks)

6. What might happen if Max accidentally added the tens column incorrectly? How would this affect the shop's final profit for the day? (2 marks)

Extension challenge: Design your own 'Market Receipt' for three different items priced between £1,000 and £5,000. Write the calculation for the total and create a 'challenge' version of your receipt where one of the digits is missing, asking a partner to solve for the missing number.