Max’s Mathematical Market Challenge

Learning objective: To subtract amounts of money using formal written methods and solve multi-step problems involving change.

Help Max the monkey calculate the costs at the local market. Use column subtraction to find the difference between prices and to calculate the change from a £10 or £20 note. Ensure you align your decimal points and pounds correctly.

Word bank: difference · column subtraction · exchange · decimal point · remainder · total · cost · change

1. Max bought a bunch of bananas for £2.45 and a bag of nuts for £3.60. Write the calculation to find the total cost, then subtract this from a £10.00 note to find the change. (3 marks)

2. The market stall sells apples for £4.20 and oranges for £2.85. Explain why we must 'exchange' a ten-pence piece when calculating the difference between these two prices using column subtraction. (3 marks)

3. If Max has £15.00 and wants to buy a basket costing £8.75, show your working out to find how much money he will have left. Justify your answer by checking it with an addition sum. (4 marks)

4. Compare and contrast: How is subtracting money different from subtracting simple whole numbers? Consider the role of the decimal point. (3 marks)

5. What might happen if you forget to include the placeholder zero when subtracting 50p from £2.00? Explain the impact on the final total. (3 marks)

6. Create your own 'Market Problem' for a partner to solve. Write a scenario involving two items costing more than £5.00 each, and provide the subtraction question for the change from £20.00. (4 marks)

Extension challenge: Design a 'Market Price List' for five different items. Create a complex challenge where a customer buys three items and pays with a £20 note. Calculate the change using at least two different subtraction steps, and explain how you ensured your answer was accurate.