

Max's Market Math Adventure

Learning objective: To solve multi-step problems involving addition, subtraction, and multiplication of money, applying reasoning to real-world contexts.

Max the monkey is helping at the local community market. He has a list of items to buy and a limited budget. Read each scenario carefully, show your working out, and justify your mathematical thinking. Remember to use the £ symbol and two decimal places for your pence.

Word bank: total · difference · product · budget · calculate · estimate · remainder · justify

1. Max finds apples for £0.45 each. He buys 6 apples for a fruit salad. If he pays with a £5.00 note, how much change should he receive? Show your calculation steps. (2 marks)

2. A punnet of strawberries costs £1.85. Max buys 3 punnets. He also buys a loaf of bread for £1.20. What is the total cost of his items? Explain how you arrived at your answer. (2 marks)

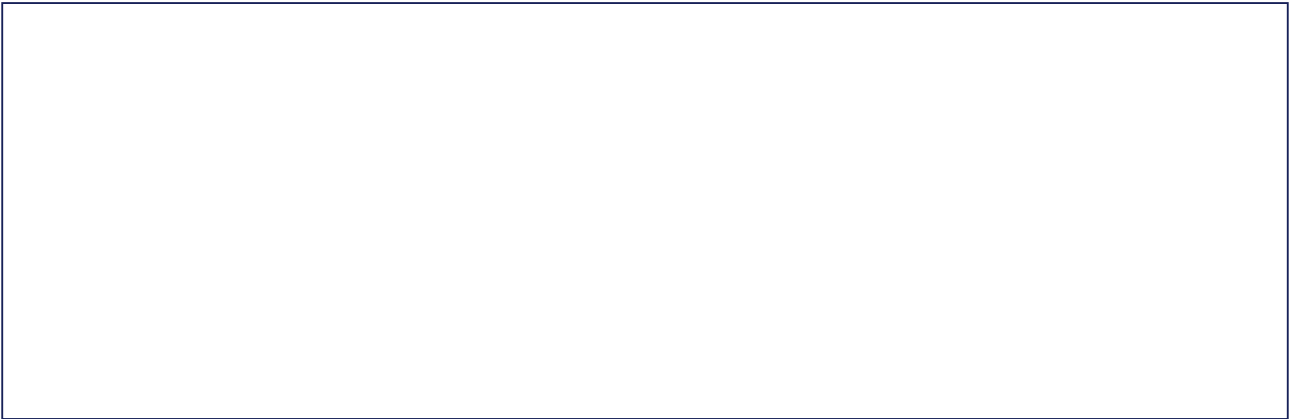
3. Compare the cost of buying 4 oranges at £0.30 each versus one bag of oranges for £1.10. Which is better value for money? Justify your answer. (2 marks)

4. Max has a budget of £10.00. He wants to buy a jar of honey for £3.40 and as many bags of flour as possible. Each bag of flour costs £0.90. How many bags can he afford? What is the remainder of his budget? (2 marks)

5. If the price of the honey increased by 50p and the price of the apples decreased by 10p, how would that change the total cost of Max's original shopping list (6 apples and 1 jar of honey)? Explain your reasoning. (2 marks)

6. What might happen if Max miscalculated the total and handed over £4.50 for items that cost £4.75? Explain the impact this would have on the market stall owner. (2 marks)

Draw: Draw a picture of Max the monkey standing at a market stall. Include labels for three items with prices, ensuring the total cost of all three items equals exactly £5.50.



Extension challenge: Design your own complex market problem involving at least three different items and a budget of £20.00. Create a 'challenge' for a partner to solve, and write down the full mark scheme including the correct method and final answer.