

Max's Festive Feast Planner

Learning objective: To apply mathematical reasoning to solve multi-step problems involving money, addition, and multiplication in a festive context.

Max the monkey is helping to organise a festive community meal. Use your maths skills to calculate the costs for the party. Remember to show your working out clearly, including decimal points for pounds and pence. Use the word bank to help you explain your mathematical reasoning.

Word bank: calculate · total · multiplication · difference · budget · estimate · decimal point · remainder

1. The Festive Shopping List: Max buys 6 packs of mince pies at £2.45 each. Calculate the total cost of the pies and explain how you used multiplication to find this. (3 marks)

2. The Decoration Budget: Max has a budget of £20.00. If he spends £12.75 on string lights and £4.50 on paper stars, how much money does he have remaining? Justify your answer. (3 marks)

3. Compare and Contrast: If Max bought 8 boxes of crackers at £1.20 each instead of 5 boxes at £1.95 each, would he spend more or less money? Explain your reasoning. (4 marks)

4. The Gift Calculation: If 4 friends decide to share the cost of a £15.00 gift equally, how much does each person pay? What might happen if the cost was not perfectly divisible by 4? (3 marks)

5. Problem Solving: Max wants to buy 12 small gifts for the guests. Each gift costs £1.65. He has £25.00. Does he have enough money? Show your calculation to prove your answer. (3 marks)

6. Creative Extension: Design your own festive menu item. Give it a price and create a word problem for a partner that involves multiplying the price by at least 7. (4 marks)

Extension challenge: If you could invite any number of guests to the feast, how would you calculate the total cost for food if every person requires £4.50 worth of supplies? Write a formula for your calculation and justify why it is the most efficient method.