

Max's Festive Feast Budgeting Challenge

Learning objective: To solve multi-step problems involving addition, subtraction, multiplication, and division with money in the context of Christmas planning.

Max the monkey is helping his forest friends organise a community Christmas feast. Use your mathematical skills to calculate the costs and quantities required for the celebration. Show your working out clearly for each calculation to ensure the budget stays balanced.

Word bank: budget · expenditure · calculate · remainder · estimate · profit · sum · total · multi-step

1. The Forest Feast Budget: If Max has a total budget of £150.00 and needs to buy 12 boxes of crackers at £4.50 each and 8 bags of nuts at £2.75 each, calculate the total cost and the remaining budget. (4 marks)

2. Comparison of Costs: Compare the cost of buying 5kg of carrots at £0.80 per kg versus a bulk bag of 5kg for £3.50. Justify which option provides the better value for money. (3 marks)

3. Division of Treats: There are 64 guests attending the feast. If Max buys 4 large tins of biscuits, each containing 48 biscuits, how many biscuits will each guest receive if they are shared equally? Explain what you would do with any remainder. (4 marks)

4. Scaling Up: If the number of guests doubles to 128, explain why the cost of the main course might not necessarily double if the butcher offers a 'buy one, get one half price' deal on turkeys. (3 marks)

5. Critical Thinking: What might happen to the overall budget if the price of festive ingredients increases by 15% due to high demand? Show how you would estimate this new total. (3 marks)

6. Creative Planning: If you were given a budget of £200.00 for a class party, create a shopping list of three items. Calculate the total cost and explain how you would distribute the remaining money effectively. (4 marks)

Extension challenge: Design a festive menu where each dish is priced differently. Create a 'party package' that includes a main course, side, and dessert, then calculate the total price for a table of 10 people, applying a 10% discount for the group.