

Max's Festive Feast and Fundraiser

Learning objective: To solve multi-step problems involving multiplication, division, addition, and subtraction within a money-based Christmas context.

Read each question carefully. Max the monkey has been busy calculating the costs for the community Christmas party. Show all your working out clearly to demonstrate your mathematical reasoning.

Max is organising a Christmas fair to raise money for the local park. He has a list of items to buy and ticket sales to track. Use your maths skills to help Max balance his festive budget.

Word bank: multiplication · division · calculation · remainder · budget · estimate · profit · expenditure

1. Max buys 12 boxes of star-shaped biscuits for £2.45 each. He also buys 8 bags of cinnamon sticks for £1.80 each. What is the total cost of these items? Show your steps. (3 marks)

2. The community centre holds 150 people. If tickets are sold at £4.50 each and all tickets are sold, how much money will the fair raise in total? (2 marks)

3. Max has a budget of £500 for decorations. If he spends £342.80 on fairy lights and £85.50 on tinsel, how much of his budget remains? Explain how you calculated the final amount. (3 marks)

4. A box of 24 handcrafted baubles costs £15.60. Max needs 100 baubles for the giant tree. How many full boxes must he buy, and how much will it cost in total? (4 marks)

5. Justify your answer: If the price of tickets increased by 50p, how would this affect the total profit if the same number of people attended? Compare this to the original total. (4 marks)

6. What might happen to the total profit if 20 fewer people attended the fair, but Max managed to reduce his expenditure by £50? Show the calculation. (4 marks)

Draw: Draw a geometric pattern for a Christmas wrapping paper design using only triangles, squares, and hexagons, ensuring the pattern repeats symmetrically.



Extension challenge: Design a 'Festive Stall' business plan. Choose three items to sell, decide on a unit cost price and a selling price for each. Calculate your projected total profit if you sell 50 of each item, accounting for a £20 stall rental fee.