

Max's Festive Fundraising Challenge

Learning objective: To solve multi-step problems involving addition, subtraction, and multiplication of money in the context of a Christmas school fair.

Read the passage below carefully. Use Max the monkey's mathematical method to break down each problem into smaller steps. Show your working out clearly to earn full marks.

Max is organising a Christmas fair to raise funds for new library books. He has a budget of £50.00 to spend on decorations. He buys 8 packs of silver tinsel at £2.50 each and 5 strings of fairy lights at £4.20 each. Once the decorations are set up, Max sells 12 jars of homemade plum jam for £3.50 each and 20 hand-painted star ornaments for £1.75 each. Max needs to calculate his total expenditure on decorations and compare it to the total money he made from his sales to see if he has reached his goal.

Word bank: total · calculate · difference · expenditure · profit · multiplication · remainder

1. Calculate the total cost of the 8 packs of tinsel and 5 strings of lights. Show your working out. (2 marks)

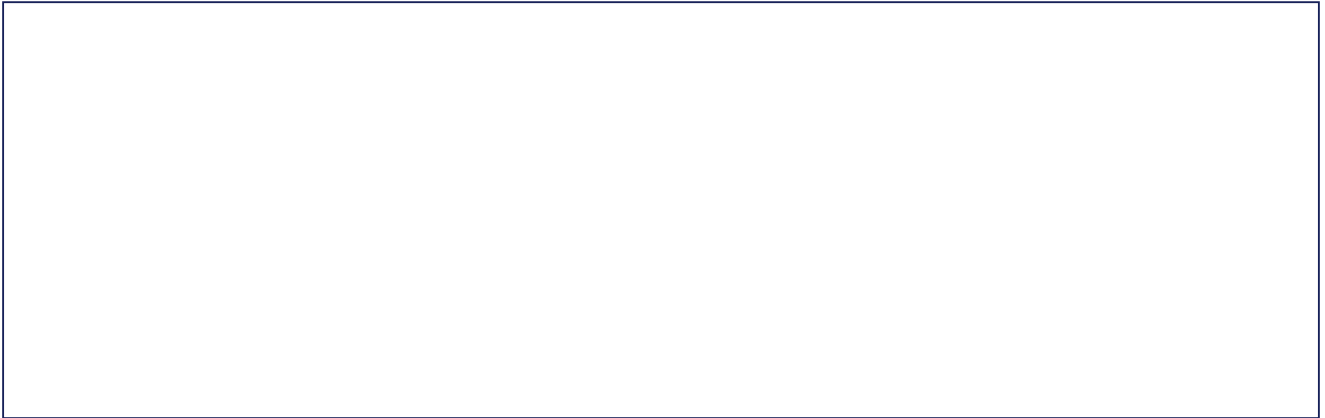
2. How much money did Max make in total from selling the jam and the star ornaments? (2 marks)

3. What is the difference between the money Max spent on decorations and the money he earned from sales? (2 marks)

4. If Max wants to make a total profit of £100.00 to buy the new books, how much more money does he need to raise? (3 marks)

5. Explain why it is important for Max to calculate his expenditure before he starts buying decorations. What might happen if he does not? (3 marks)

Draw: Draw a festive stall for Max's fair, including labels showing the prices of three items you might sell to help him reach his £100.00 profit goal.



Extension challenge: Justify your answer: If Max decided to lower the price of his star ornaments to £1.25, how many more ornaments would he need to sell to reach the same total income? Explain the mathematical relationship between the price decrease and the quantity required.