

Max's Festive Feast and Mathematical Fun

Learning objective: To apply Grade 3 mathematical skills including money, multiplication, division, and data interpretation within a seasonal context.

Read each question carefully. Show your working out in the space provided to ensure you gain marks for your method, even if your final answer has a minor error. Use £ and p for currency.

Max the monkey is organising a winter banquet for all his friends. He has a budget of £50.00 to buy decorations, snacks, and gifts. He needs to calculate costs carefully to ensure he stays within his budget while making sure everyone has enough to eat and share.

Word bank: Calculation · Estimate · Product · Quotient · Difference · Total · Decimal · Partitioning

1. Max buys 6 bags of star-shaped cookies. Each bag costs £1.45. What is the total cost of the cookies? Show your calculation. (2 marks)

2. Max has 48 shiny baubles to hang on the tree. He wants to share them equally between 4 large branches. How many baubles will be on each branch? (1 mark)

3. A set of fairy lights costs £8.99. If Max pays with a £20.00 note, how much change should he receive? (2 marks)

4. Pip the caterpillar wants to buy 3 books as gifts. Each book costs £4.50. Does Max have enough money left from his original £50.00 budget if he has already spent the money from questions 1 and 3? Justify your answer with a calculation. (4 marks)

5. Compare and contrast the cost of buying 4 items at £2.25 each versus buying 3 items at £3.10 each. Which is more expensive and by how much? (3 marks)

6. Max recorded the number of guests arriving at different times: 4 guests arrived at 2:00 pm, 8 guests at 3:00 pm, and 12 guests at 4:00 pm. Explain why the total number of guests is a multiple of 4. What might happen if 5 more guests arrive unexpectedly? (3 marks)

7. Max decides to make a pattern with his decorations: Red, Gold, Green, Red, Gold, Green. If the pattern continues, what color will the 15th decoration be? Explain your reasoning. (5 marks)

Draw: Draw a symmetrical snowflake design that Max could use as a decoration for his banquet, ensuring it has at least four lines of symmetry.



Extension challenge: Imagine you are planning a winter party for ten friends. Create a table showing five different items you wish to buy, their individual prices, and the total cost. If you have a budget of £40.00, what strategy would you use to ensure you do not overspend? Write a short paragraph explaining your logic. Total: /25