

Max's Festive Maths Challenge

Learning objective: To apply Year 6 arithmetic skills, including multi-step problem solving, percentages, and calculating mean averages within a festive context.

Read each question carefully. Show your working out clearly to earn marks. Use the information provided to solve the problems.

Max the monkey is organising a winter fair to raise money for his local community centre. He has various stalls and needs your help to manage the maths behind the magic.

Word bank: Percentage · Mean average · Calculation · Budget · Profit · Ratio

1. Max is selling boxes of handmade mince pies. Each box costs £4.50. If he sells 120 boxes, what is the total revenue he will collect? (2 marks)

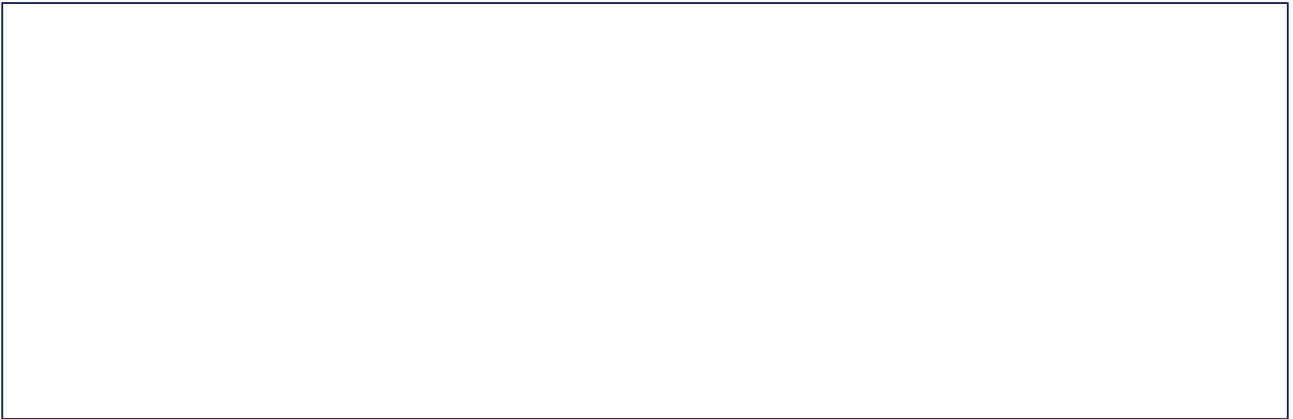
2. The ingredients for the pies cost £180 in total. Max wants to give 20% of his total revenue (from Question 1) to the community centre. How much money will he have left for his own expenses after this donation? (3 marks)

3. At the winter fair, Max tracks the number of visitors over four hours. The hourly totals were: 45, 62, 38, and 55. Calculate the mean number of visitors per hour. (2 marks)

4. Max is decorating the hall. He has 15 metres of tinsel. He uses 3.75 metres for the main tree and divides the remaining tinsel equally between 5 smaller decorations. How many metres of tinsel does each smaller decoration get? (3 marks)

5. Max buys 3 packs of baubles. Each pack costs £6.25. If he pays with a £20 note, how much change should he receive? (2 marks)

Draw: Draw a festive stall run by Max the monkey, featuring a sign showing a maths equation related to his items for sale.



Extension challenge: Max decides to increase the price of his mince pies by 10% next year to cover inflation. If the current price is £4.50, what will the new price be? Show your calculation.