

Max's Market Stall Statistics

Learning objective: To interpret, present and compare data using bar charts, pictograms and tables.

Read the data collected by Max the monkey during his visit to the village market. Use the information to answer the questions, ensuring you show your working out for any calculations.

Max visited the local village market to help the stallholders track their fruit sales for the day. He recorded the number of punnets of fruit sold in the following table:

Strawberries: 45
Blueberries: 30
Raspberries: 25
Blackberries: 20

Max noted that each symbol on his pictogram represented 5 punnets of fruit. He wants to display this information on a bar chart to show the community which fruit was the most popular and to help the farmers plan their harvest for next week.

Word bank: data · frequency · bar chart · pictogram · scale · total · difference · horizontal axis · vertical axis

1. Using the data provided, calculate the total number of fruit punnets sold at the market. Show your addition. (2 marks)

2. If Max were to draw a pictogram, how many symbols would he need to draw for the strawberries? Explain how you arrived at your answer. (2 marks)

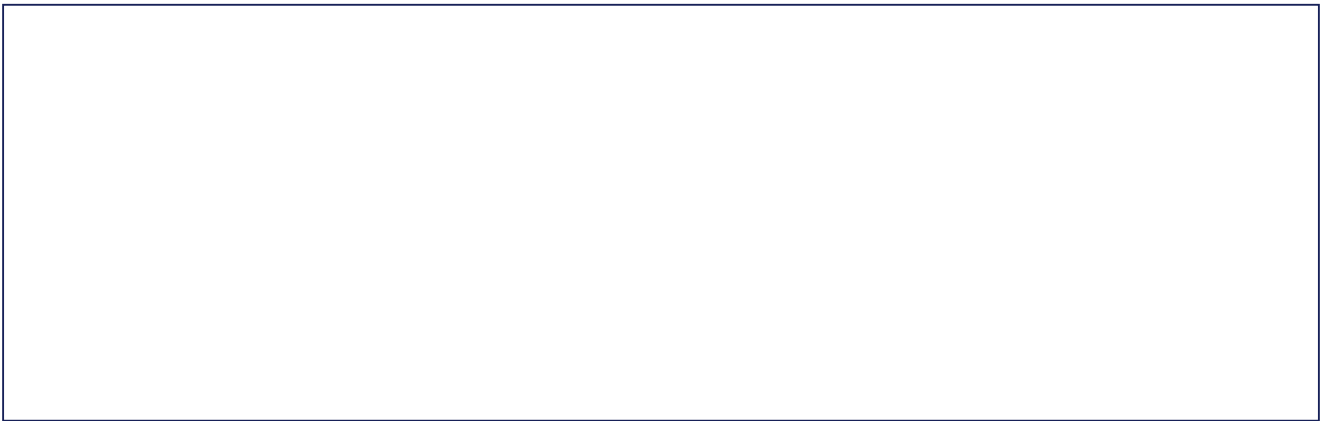
3. What is the difference in sales between the most popular fruit and the least popular fruit? (2 marks)

4. If each punnet of strawberries costs £3, calculate the total revenue made from strawberry sales. (2 marks)

5. Explain why it is important for a farmer to use a bar chart to represent their sales data rather than just a list of numbers. (3 marks)

6. Justify your answer: If the farmers decide to increase the price of all fruit by £1 next week, what might happen to the number of punnets sold? Use your knowledge of statistics to support your prediction. (3 marks)

Draw: Draw a bar chart to represent the data Max collected. Remember to label the horizontal axis with the fruit names and the vertical axis with a scale of 0 to 50, going up in intervals of 5.



Extension challenge: Imagine the farmers want to introduce a new fruit next week. Create a survey question to ask your classmates, then collect and present the data in a tally chart. Write a short paragraph explaining which fruit you would recommend they stock based on your findings.