

Year 3 Statistics Assessment: Max the Mathematician's Fruit Shop

Learning objective: To interpret and present data using bar charts, pictograms, and tables, and to solve one-step and two-step problems using information presented in scaled bar charts and pictograms.

Read each question carefully. Max the monkey has collected data from his fruit shop. Use the information provided to answer the questions. Show your working out where possible.

Max the monkey is organising his fruit shop. He has recorded how many pieces of fruit he sold on Saturday: Apples: 10, Bananas: 25, Pears: 15, Oranges: 20. Each symbol in his pictogram represents 5 pieces of fruit.

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

1. Using the data provided, draw a pictogram to show how many of each fruit Max sold. Remember to include a key. (4 marks)

2. How many bananas did Max sell on Saturday? (1 mark)

3. What is the difference between the number of apples sold and the number of oranges sold? (2 marks)

4. If Max sells an apple for £1 and a pear for £2, what is the total cost of 5 apples and 3 pears? (3 marks)

5. Max decides to start selling mangoes. On Sunday, he sells 30 mangoes. If he uses a scale of 1 symbol = 10 mangoes, how many symbols would you draw for his pictogram? (3 marks)

6. Max wants to know which fruit was the most popular and which was the least popular. Write a short paragraph explaining how you found this out using the data, and why using a bar chart might make it easier to compare the numbers. (5 marks)

7. If Max sells 10 bananas at £2 each and 5 oranges at £1 each, how much money does he make in total? (3 marks)

8. Look at the total fruit sold (Apples, Bananas, Pears, Oranges). Calculate the total number of items sold. (4 marks)

Draw: Draw a bar chart on squared paper representing the fruit sales data (Apples: 10, Bananas: 25, Pears: 15, Oranges: 20). Ensure your y-axis has a scale of 5.



Extension challenge: Total: /25