

Year 6 Statistics Assessment: Data Detectives

Learning objective: To interpret and construct pie charts, line graphs, and calculate the mean as an average.

Read each question carefully. Show your working out for multi-step problems. Use a ruler for graphs. Good luck!

Max the monkey is helping the forest animals manage their fruit stall. He has recorded the sales from Monday to Friday: Monday £12, Tuesday £15, Wednesday £10, Thursday £18, and Friday £25. Meanwhile, Bea the honeybee has created a pie chart showing the types of flowers visited by her hive: 50% Lavender, 25% Clover, 15% Bluebell, and 10% Poppy.

Word bank: Mean · Average · Frequency · Axis · Scale · Interpret · Data · Pie Chart

1. Calculate the mean daily amount of money earned by the fruit stall from Monday to Friday. Show your calculation. (2 marks)

2. If the total number of flower visits recorded by Bea is 200, how many visits were to Bluebells? Explain your method. (3 marks)

3. Max wants to draw a line graph for his fruit stall sales. What labels should he put on the x-axis and the y-axis? (2 marks)

4. Look at the data for the fruit stall. If sales on Saturday were £30, what would the new mean be for the six days? (3 marks)

5. Explain why a pie chart is a useful way to display the proportion of flowers Bea's hive visits, rather than a line graph. (5 marks)

6. Construct a simple bar chart based on the following frequency table: Apples (10), Bananas (15), Pears (5). Ensure you label your axes. (5 marks)

7. If the fruit stall sells 40 items in total and $\frac{1}{8}$ of them are rotten, how many items are rotten? Express this as a percentage. (5 marks)

Draw: Draw a small, accurate bar chart showing the fruit sales: Apples (10), Bananas (15), and Pears (5) on a grid.



Extension challenge: Total: /25