

Year 5 Statistics Assessment: The BookFlik Garden Survey

Learning objective: To interpret, construct, and solve problems using line graphs, tables, and two-way tables.

Read each question carefully. Show your working out for all calculation questions. Use a ruler for drawing graphs. You have 45 minutes to complete this assessment.

Max the monkey and Bea the honeybee have been counting the flowers in the BookFlik garden over a five-day period to see how many bees visit each morning. On Monday, 12 bees visited. On Tuesday, 18 bees visited. On Wednesday, 15 bees visited. On Thursday, 22 bees visited. On Friday, 25 bees visited.

Word bank: data · line graph · two-way table · axis · interval · trend · total · difference

1. Using the information in the passage, complete the table below for the bee visits from Monday to Friday. (3 marks)

2. What was the total number of bee visits recorded by Max and Bea over the five days? Show your working. (2 marks)

3. Max created a two-way table to track fruit snacks in the garden. 15 apples and 10 pears were eaten on Saturday. On Sunday, 8 apples and 12 pears were eaten. Create a two-way table to show this data. (4 marks)

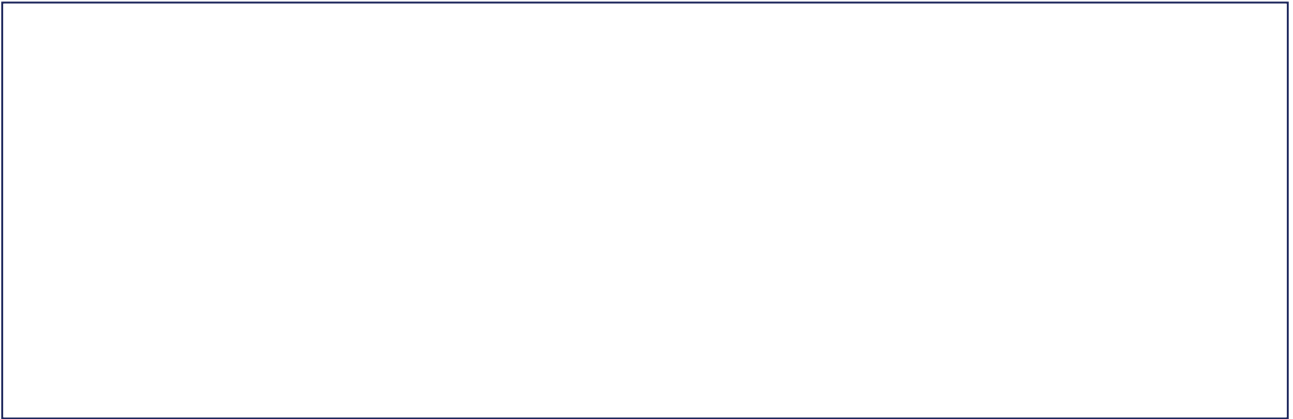
4. Looking at the bee visit data, describe the trend you see from Monday to Friday. Why might the number of visits have changed? (4 marks)

5. If each bee visit represents a gardener gaining £2 in honey production value, calculate the total value of the honey produced from Monday to Friday. Show your calculation. (2 marks)

6. Create a line graph on the grid below to represent the bee visits. Remember to label the x-axis (days) and y-axis (number of bees) and give your graph a title. (5 marks)

7. Compare the number of visits on Monday and Tuesday to the number of visits on Thursday and Friday. What is the difference between these two periods? (5 marks)

Draw: Draw a line graph grid with 10 squares vertically and 5 squares horizontally to plot the bee visit data.



Extension challenge: Total: /25. Imagine you are Bea the honeybee. Write a short diary entry (5 marks) explaining why you think more bees visited the garden on Friday compared to Monday, using mathematical vocabulary such as 'increase', 'total', and 'data'.