

Kit's Computing Challenge: Becoming a Data Detective

Learning objective: To collect, organise, and interpret data sets using branching databases and tally charts.

Use this writing frame to document your findings from our classroom survey. Follow the prompts to explain how you organised your data and what patterns you discovered.

To understand the preferences of our class, I decided to conduct a survey and organise the results into a clear, visual format.

Word bank: categorise · branching database · frequently · in contrast · tally chart · consequently · significant · whereas · accuracy

1. 1. Data Collection: Describe the method you used to gather your information. Why did you choose this specific approach to ensure your data remained accurate? (2 marks)

2. 2. Structuring Information: Explain how you chose the criteria for your branching database. Why is it important to have clear, 'yes' or 'no' questions when sorting data? (3 marks)

3. 3. Analysing Patterns: Compare the most popular results with the least popular ones. What evidence from your tally chart supports your conclusion? (3 marks)

4. 4. Justification: If you were to repeat this survey with a larger group, how might your results change? Justify your prediction. (3 marks)

5. 5. Evaluation: What might happen if you included an 'other' category in your data set? How would this impact the way you interpret the final information? (3 marks)

6. 6. Creative Extension: Imagine you are presenting this data to the class. Write a summary sentence that uses a persuasive tone to highlight the most surprising discovery from your research. (2 marks)

Extension challenge: Design a 'Greater Depth' challenge: Create a complex branching database diagram that includes at least four levels of questions. Write a brief explanation justifying why your chosen path is the most efficient way to sort these items.