

Grade 4 Computing Assessment: Data Handling

Learning objective: To demonstrate understanding of collecting, organising, and interpreting data using digital tools and databases.

Read each question carefully. Use the word bank to help you with terminology. Write your answers clearly in the spaces provided.

Kit the fox is helping the BookFlik group organize their library. He has created a digital database to track all their books. Each book has its own entry, and Kit uses specific categories like 'Title', 'Author', 'Genre', and 'Number of Pages' to keep everything tidy.

Word bank: Database · Record · Field · Query · Sort · Filter · Chart · Information

1. In a database, what is the specific name for one single row that contains all the details about one specific book? (1 mark)

2. Kit wants to find all the books in the 'Adventure' genre. What digital tool would he use to search for this specific information within his database? (1 mark)

3. Explain the difference between 'sorting' data and 'filtering' data. Give one example of when you might use each. (4 marks)

4. If Kit wants to show the group the most popular genres as a visual display, which type of digital tool or graph should he use and why? (3 marks)

5. Max the monkey is calculating the cost of new books. He has a list of prices: £4.50, £6.20, £3.99, and £5.50. If he adds these to a database, why is it important that the price 'field' is set to a number format rather than text? (3 marks)

6. Imagine you are designing a database to track the fruit sold at a school tuck store. List three 'fields' you would include in your database to help the shopkeeper manage their stock effectively. (3 marks)

7. Extended Writing Task: Describe the process of creating a survey to collect data from your classmates. Explain how you would plan your questions, how you would collect the data, and how you would present your findings so that it is easy for others to understand. Why is it important to ensure your data is accurate? (10 marks)

Draw: Draw a simple layout of a database table showing three columns (fields) and two rows (records) for a collection of classroom stationery items.

Extension challenge: Total: /25. Challenge: If you could create a database for anything in the world, what would it be and which three pieces of information (fields) would be the most important to track?