

Kit's Computing Challenge: Organising Data

Learning objective: To understand how to collect, organise, and present data using databases and branching keys.

Read each question carefully and use your knowledge of data handling to solve Kit the Fox's computing puzzles. Ensure you use clear and accurate terminology.

Word bank: Database · Field · Record · Branching key · Criteria · Data

1. Kit the Fox is building a database of items found in his woodland library. Explain the difference between a 'field' and a 'record' in a database. (2 marks)

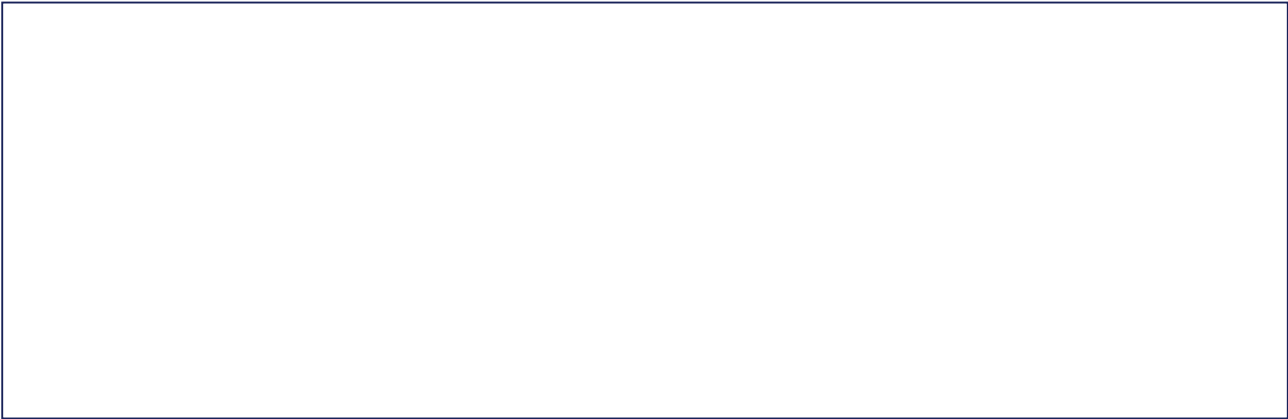
2. If Kit wants to search his database for all books that cost less than £5.00, what is this specific instruction called in data handling terms? (1 mark)

3. Design a simple branching key with two levels to sort the following animals: Lion, Owl, Dolphin, Bee. Start with the question: 'Does it live on land?' (3 marks)

4. Why is it important to use consistent data entry (e.g., always writing '£5.50' instead of 'five pounds fifty') when building a digital database? (2 marks)

5. Max the Monkey is counting fruit for a picnic. He has 12 apples at £0.25 each and 5 bananas at £0.40 each. Write the calculation needed to find the total cost of all the fruit. (2 marks)

Draw: Draw a flowchart or a simple database table layout that Kit the Fox might use to track the different genres of books in his collection.



Extension challenge: Research a 'flat-file' database. Write a short paragraph explaining why a digital database is more efficient than using a paper-based filing system for a large amount of information.