

Database Detectives: Organising Information with Kit

Learning objective: To understand how databases are used to store, organize, and retrieve information effectively.

Kit the fox needs your help to build a digital database for his collection of woodland treasures. Use the writing scaffold below to explain how databases work and why they are useful tools for computing.

A database is a structured set of data held in a computer, designed to make finding specific information quick and easy.

Word bank: record · field · attribute · search query · organized · efficiently · data retrieval · categories · specifically · in contrast

1. What is a database and why is it more efficient than keeping information in a paper notebook? Start by saying: A database is different from a simple list because... (2 marks)

2. Describe the difference between a 'record' and a 'field' in a database. You could use an example like a library book collection. Start by saying: In a database, a field represents... (2 marks)

3. How do we use 'search queries' to find information? Start by saying: When we need to find a specific item, we use a search query to... (2 marks)

4. Why is it important to ensure the data entered into a database is accurate? Start by saying: Accuracy is essential because if the data is incorrect... (2 marks)

5. Imagine you are building a database for Kit's treasures. What fields would you include to make sure everything is easy to find? Start by saying: To organize Kit's collection, I would include fields such as... (2 marks)

Extension challenge: Create a design for a database table on a piece of paper. Choose a topic (e.g., school sports equipment, planets in the solar system, or kitchen cupboard items) and list at least four fields you would use to categorize your items.