# Data Detectives: Organising Your Digital World

*Learning objective: I can explain how databases work and design a structure to organise information.*

*About 15 minutes. Grown-up tip: Ask your child to imagine how a supermarket uses a database to track how many loaves of bread are left on the shelf.*

Kit the fox loves sorting facts! Think of a database as a digital filing cabinet. To build one, you need 'fields' (categories like Name or Price) and 'records' (the actual items). Use this frame to plan your own database for a local corner shop. Example: If storing sweets, your fields could be 'Name', 'Price' and 'Stock Level'.

A database is a structured collection of data, designed to help us search, sort, and find information quickly and accurately.

*Word bank: categorise · record · field · query · data entry · systematic · primary key · information*

**1. Identify three distinct fields you would need to create a database for a library of books in your school classroom. (3 marks)**

**2. Why is it important to use consistent formatting (e.g., always using £ for prices) when entering data into a database? Give one reason. (2 marks)**

**3. If you wanted to find every item in your shop that costs less than £2.00, what do you call this type of search in computing? (1 mark)**

**4. Describe the difference between a 'field' and a 'record'. Use an example from your school life to support your explanation. (3 marks)**

**5. Explain why a database is more efficient for managing large amounts of information than a handwritten list. Provide evidence based on speed or accuracy. (3 marks)**

**Draw: Draw a simple table layout for a database that tracks the different types of birds seen in a local park, including columns for the bird's name, the date seen, and the location.**

*Extension challenge: Imagine you are building a database for a sports club. Create a 'Primary Key'—a unique identifier for each member—and explain why no two members should have the same one.*

**I did it!** **Name: _____** **Date: _____**

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