Data Detectives: Organising the Digital World

About 15 minutes. Grown-up tip: Ask your child to think of three categories of information they would use to create a database of their favourite snacks.

Think of a database as a giant, digital filing cabinet. To find what you need, you use a 'query'—a search instruction. For example, if you search for 'Red' in a database of school jumpers, the system filters all entries to show only those that match your criteria.

■ A database is a structured collection of data. What is the name of a single row in a database that contains all information about one specific item?

■ Fields are the specific categories of information within a record, such as 'Name' or 'Price'. Why is it important for fields to have consistent names?

■ When you perform a search, you are sending a 'query'. How does a query help you manage large amounts of information?

■ Sorting data allows you to arrange information in a specific order, such as alphabetical or numerical. How would sorting help you find the most expensive item in a shop's database?

■ Databases rely on accuracy. What happens to a search result if a piece of data is entered with a spelling mistake in the wrong field?

Did you know? Did you know? Every time you use a library catalogue to find a book, you are using a database! It stores millions of records, each containing fields like 'Author', 'Title', and 'ISBN', allowing you to locate a specific story in seconds.

Key vocabulary: Record · Field · Query · Database · Sort