



Databases & Spreadsheets

Gold

These Gold questions require explaining data organisation and reasoning about real-world applications.

Name: _____ Date: _____

Section A: Spreadsheet Reasoning

1. Explain why a spreadsheet formula referencing a cell (e.g. " $=A1+B1$ ") is more useful than typing a fixed number.

2. Design a simple spreadsheet layout for tracking a class's weekly reading minutes - what columns would you include?

3. Explain why a chart might communicate data more clearly than a large table of numbers.

4. Why might a business use a spreadsheet to model different scenarios (e.g. prices, costs) before making a decision?

5. Explain what might go wrong if a formula in a spreadsheet references the wrong cell.

Section B: Database Reasoning

1. Explain why searching a well-organised database is much faster than searching an unsorted list by hand.

2. Design the key fields (columns) you would need for a database storing information about a school's library books.

3. Explain why keeping personal data in a database secure and accurate is important.

4. Why might a hospital or bank need an especially secure database?

5. Explain the difference between data (raw facts) and information (organised, useful facts) using a database example.

