



Year 6 Knowledge Organiser

Computing – Data

What I should already know.

- Design questions using key words, to search a large pre-prepared database.
- Use complex searches (and/or, is greater/less than) to search data when looking for relationships and patterns in data.
- Modify a search pattern in order to find specific information.
- Check for accuracy by checking data, using different views, search tools, and graphing. Identify and correct inaccuracies.
- Solve complex enquiries involving selecting, processing, and presenting data; drawing conclusions from the process (e.g. is there a relationship between mini-beast habitats and diets?).
- Collect appropriate data, enter it into a database and use the database to answer simple questions and provide information.
- Raise questions of the data and translate them into search criteria.
- Recognise the need for accuracy when entering and interrogating data and how this will affect the quality of the information gained.
- Recognise the consequences of data not being accurate, relate to the wider world (e.g. Police, doctors', banks', schools' databases).
- Discuss how ICT enables the user to search and filter large amounts of different types of data to find information. Describe the advantages of using these tools and the need for accuracy.
- Understand the need for data protection and some of the rights of individuals over stored data and how it affects use and storage of data in the real world.
- Understand the need to structure information properly in a database.
- Know, understand and use the vocabulary: file, record, field, data, information.
- Talk about the advantages of using ICT to change, sort, interrogate and classify data quickly.

What will I know by the end of the unit?

- Construct, refine and interpret frequency tables; bar charts with grouped discrete data; line graphs; interpret pie charts.
- Make predictions and changes and check results.
- Change data and formulae in a spreadsheet to answer 'what if...?' questions and check predictions.
- Use more advanced formulae (Sum, average, mode etc) and produce graphs and pie-charts.
- Use information from the analysis of data to present findings in another application.

Key Vocabulary

Spreadsheet
 Patterns
 Formula
 SUM
 Cell
 Line graph
 Pie Charts
 What if
 Average

Key Knowledge

- Understand the need for data protection and some of the rights of individuals over stored data and how it affects use and storage of data in the real world.
- Understand that changes made to one element of a spreadsheet can impact on the other calculations.
- Understand that spreadsheets can automate functions, making it easier to test variables (e.g. when planning a budget you can change number of items and see the changed total cost).
- Understand that spreadsheets can be used to explore mathematical models.
- Understand the need for accuracy and frequent checking when entering formulae.
- Understand the possible consequences of inaccurate data or formulae.
- Recognise similarities and differences between ICT and paper-based systems.

Online Safety

Protect and Secure



Is it real?



Be E-safe and enjoy!



Software

