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| **Lent 2: Data and information – Flat-file databases**  **Subject Computers  Year 5  Medium Term Planning** | | | | | | |
| **National Curriculum Objectives**   * Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content * Select, use, and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems, and content that accomplish given goals, including collecting, analysing, evaluating, and presenting data and information | | | | | | |
|  | Lesson 1 | Lesson 2 | Lesson 3 | Lesson 4 | Lesson 5 | Lesson 6 |
| **Learning intention for each lesson:** | I know how to use a form to record information | I know how to compare paper and computer-based databases | I know how to outline how you can answer questions by grouping and then sorting data | I know how to explain that tools can be used to select specific data | I know how to explain that computer programs can be used to compare data visually | I know how to use a real-world database to answer questions |
| **Recall and retrieval** | E safety new vocabulary and assess existing knowledge linked to previous learning. | E safety  Sort the cards to answer the questions. | E safety  Name different ways of ordering records. | E safety  Compare and contrast paper and J2E grouping and sorting. | E safety  Name different search  Techiques. | E safety  What questions could we ask about this data? |
| **Sequence of knowledge throughout the lesson** | **Key Knowledge**   * I know how to use a card template to create a data set of eight to ten cards linked to a theme, e.g. animals. * I know how to complete records for each of the animals in their database. * I know how to sort the cards to answer questions about the data. | **Key Knowledge**   * I know how to use a computer-based database to examine how data can be recorded and viewed. * I know that a database consists of ‘records’, and that each record contains ‘fields’. * I know how to order records in different ways and compare this database to the paper database they created in Lesson 1. | **Key Knowledge**   * I know how to investigate how records can be grouped, using both the paper record cards and a computer-based database from J2E. * I know how to use ‘grouping’ and ‘sorting’ to answer questions about the data. | **Key Knowledge**   * I know how to develop search techniques to answer questions about the data. * I know how to use advanced techniques to search for more than one field. * I know how to practise using advanced techniques using unplugged methods (without using computers), and using a computer database. | **Key Knowledge**   * I know how to consider what makes a useful chart. * I know how to consider how charts can be used to compare data. * I know how to create charts from their data in order to answer questions about it. | **Key Knowledge**   * I know how to use a real-life database to ask questions and find answers in the context of a flight search based on set parameters. * I know how to in the role of a travel agent present findings, including how they arrived at their chosen options. |
| **Scaffolding** | Prompts for question to be answered. | Paired with HA to perform investigation. | Scaffolded recording. | Simple viewing of data. | Mixed groups | Simple interpretation using prompts. |
| **Challenge** | Answer each others questions related to the data. | Paired with HA to perform investigation. | Write about the data they have captured. | Explain different ways of viewing. | Mixed groups | Write a conclusions explaining results and relating them to the benefits of using a data logger. |
|  | **Key Vocabulary**  Database, data, information, record, field, sort, order, group | **Key Vocabulary**  Database, data, field, record, sort, order | **Key Vocabulary**  Database, record, field, group, search, sort, order | **Key Vocabulary**  Database, record, field, value, search, criteria | **Key Vocabulary**  Database, record, field, graph, chart, axis, compare, filter | **Key Vocabulary**  Database, field, record, graph, chart, presentation |