Term 2 Database Project

Week		Activities	Resources	Differentiation	Syllabus Link	Assessment Method	Careers / Citizenship
Planning	1	**Planning The Database Structure** Introduce pupils to the idea of designing a database to hold information about friends and families or celebrities e.g. a birthday database. Discuss types of data with pupils – work through examples on the board. In pairs, pupils should make selections based on relevance and quality: they will not need hundreds of details. They should create a list showing the field names and data type for each piece of information required. Pupils should begin to plan how to obtain and use the information required – they will need some kind of data capture sheet that will relate to the fields in the database. Create data capture sheet in MS Word. Search the Internet for a list of star signs and their respective dates; search for celebrities and their birthdays. **H/W** Create/Fill data capture sheet with test data – at least 20 entries.	Task Brief MS Access Paper for planning	The nature of the activity should allow more able pupils to work ahead and try out advanced features.	IT3.1 Plan and use different sources to search for, and select, information required…	Pupils should have field name/type list, a sketch of their database and a data capture sheet by the end of the lesson.	**Researcher** **Database Administrator**
Designing	2	**Designing The Database** Recap purpose and last lesson's activities. Pupils should begin designing the database in MS Access – select blank Access database and create it in design view, which allows them to specify the data types. They can take this opportunity to make any necessary corrections or adjustments to the database design. Once the data has been entered, pupils should sort it into ascending or descending values. They should print out copies of the unsorted and sorted database and annotate accordingly. H/W Make sure all work to date is completed and ready to move on to development activities next week.	Completed data capture sheet MS Access	More able – create a data entry form using the form wizard to make the database look more professional.	IT3.2 Explore, develop and exchange information, and derive new information…	Pupils should have created their table and entered test data by the end of the lesson and printed out their datasheets.	

Developing	3	**Developing** Validation is necessary to ensure that the correct data is entered into the database when combo boxes or other shortcuts are not used. Explain that the use of combo boxes is a form of forced validation, but that where manual entry exists, mistakes can occur in the data. Rules should also be explained to the users, so validation text is necessary. Pupils should form larger groups to discuss types of validation necessary and use the views of others to guide their design. They should then move on to adding validation rules and error messages to their tables and then testing them. **H/W** Pupils should think of 3 questions that could be answered by their database using a query.	MS Access	More able pupils should be able to apply a range of validation rules, default options and error messages.	IT3.2 IT3.3	Screen shots of validation in progress	
Querying	4	**Querying and Reporting** Introduce query criteria – AND, OR, comparisons. Pupils should use their 3 questions to create 3 queries using either the design view or wizard features. Once pupils have created queries, they should create a report to show the results in a more attractive format. Experiment with creating a report and making sure that the information fits neatly onto the printed page. **H/W** Pupils should write a report explaining what they did during the database project. • What was the purpose of your database? • What information did you need? • How did you go about finding the information? • Explain the design of your database. • What information did you choose to sort in your database? • What forms of validation did you use in your database and why was it necessary? • What queries did you create in you database? • What kind of report did you create? • Explain any other features you used.	MS Access Query questions	More able should use comparison operators (=, =>, >, <=, <, between) Use switchboard manager to create an options menu and create an *AutoExec* macro to automatically load the menu when the database is opened	IT3.2 IT3.3 Present information…	Printouts of queries and reports Completed report.	