

## D Scheme for Database

Week	Teaching points	Objectives	Proposed Method	Extension
1	Purpose of databases, Databases in life, Tables and what is stored	All to understand what a database is, how we use them and various methods of interacting with them. Pupils should also have considered what they will store in their hobbies database. Start creating tables.	Start by looking at a database example on the Internet (for example a property website, second-hand car website or airline website) and demonstrate narrowing down results. Introduce hobbies database topic and the purpose of it. Pupils to fill in worksheet for fields. Start setting up tables and fields, no relationships yet.	More able could go on to validation on their fields. More important at this stage, is that they understand the purpose.
2	Validation & Verification, Layout design concepts e.g. navigation, fields, difference between tables and layouts. Understanding of field types. Colour schemes	All to have an appreciation of validation, Simple navigation buttons. Creation of records (including a button to automate the task).	Explanation of validation/verification. Explain the difference between layouts & tables. Get going on making layouts. Introduce the idea of value lists (validation and record creation).	To understand the difference between Validation & Verification. Create value lists with pop-up menus.
3	Connecting the tables: Participation table. Understanding of relationships. Purpose of portals and the benefits to the user. Understanding of key fields	To have created 10 records of students and 10 hobbies (for testing). To have created a middle table (participation), to have created basic relationships between all tables. All to have created 2 portals (repetition to remember). To have allocate students to hobbies. Value lists for participation layout.	Start with reminding students of the purpose of databases. Introduce connecting separate sets of data together. Go through creating middle table and relationships. When all have done this, go straight on to portals. (Important that portals happen in this lesson as kids see the purpose of relationships). Pupils need to create about 20 records in participation. Get them making value lists for participation layout (saves loads of time!)	Understanding and implementation of 1 – many relationships (Don't push this on all kids)

4	Understand about container fields. Understand the purpose of being able to search / sort records. Understand the need for a different type of layout to displaying resulting information effectively. (form or list).	All to use container fields to show images to go with hobbies. All to create a search results page and use it.	Explain about containers and get kids to use them and get some pics. Explain about find mode. Let them practice. Explain about creating different types of layouts for Searching.	To create 2 layouts for search, 1) enter criteria 2) display results. Explain simple script of 2 steps (perform find, go to layout).
5	Explain about homepage for ease of navigation. Purpose of scripting	Create a home page. All to have created to simple script to go from home page to a search page and in to find mode.	Explain about the purpose of a home page. Let them make one (button for each layout). Explain scripts as a button that does more than 1 thing. Let them get on and make a simple one of 2 steps (change layout and enter find mode for eg).	More advanced scripts.
6	(This last week can be used for mopping up those that are slightly behind. Arguably, week 5 objectives are a benchmark for good achievement) They should have the tools by now for modifying/adding to their own systems freely. Let them explore the script steps available. Now would be the <b>earliest</b> you should introduce the 'talking' script step.		Let them explore the software, create more scripts with more steps. Support as needed. We can discuss this week's objectives in the department meeting relative to the progress of the groups.	