Lesson Plan

Date	
Period	
Class	7.
Lesson	Lesson 6 Databases

Context of the lesson Where this fits into the "Big Picture"	This unit is about data handling for Year 7. It allows you to review pupils' learning from KS2 and to introduce them to some of the ICT Framework objectives. They find out what the term 'database' means and learn to access and use databases in different formats. They learn how to collect data and how to search for data effectively. They also learn how to write their own hypothesis.
MLO for this lesson. What will pupils know/understand by the end of the lesson	*Know:* why queries are so useful to use in a database *Understand:.* How to use criteria to search for specific records *Be able to:* write a query to find a record from a database

| **Teacher input/Activities.** What the pupils should undertake with approximate timings. | Greet and settle students.

Starter
Whilst students are arriving hand out a copy of 'starter_crossword.doc' either to individual students or to pairs. Students should work quietly through the starter activity whilst you are taking the register and collect homework from last week.

Go through the answers with the class

Teacher led discussion
Ask students for a definition of a database. Confirm with them that databases can also be paper-based. Show them a copy of the yellow pages or a telephone directory and ask them if that is a database (answer is yes).

Hand out a couple of copies of the yellow pages/phone book to different sides of the class. Write a phone number on the board and ask students to find the phone number in the book. Give them a minute or two. Ask them how long they think it would take them to find it.

Remind students that the main reason for using a database is to make it easy for you to find particular groups/categories of data quickly. The phone directory is a database, and if you knew the name of the person/business, it would be reasonably fast to find the phone number. However, if you want to search on a different criteria such as phone number alone, a paper-based system is not the most effective.

Explain that Directory Enquiries store not only all the telephone numbers in the books in front of them, but all the numbers in the UK. Ask students how quickly they think that Directory Enquiries could find a phone number for them if they were to ring them today. Ask them how they think that Directory Enquires can find the information so quickly
Bring the discussion around to queries. | 7.5 mins

5 mins |

	Teacher led demonstration
	Remind students about the database they were using last week, 'filmcharacters.mbd'.
	Tell them that they are going to learn to use queries to find the right characters to star in their new Superhero movie
	
	Open query 1
	Show them where the field names appear
	Show them the 'run' button and explain what it does
	Run the query and ask them how many records were found (their version will have more because they added extra records last week).
	
	Show them how to go back and forth between design and datasheet view and explain the difference.
	
	Explain that you want to find all of the Henchmen in the database (criteria = henchman)
	Show them where to enter the criteria correctly and run the query. Ask them how many records were found.
	
	Tell them that you want to search for all the Super heroes (critera = super hero)
	Show them how to go back to design view, clear a criteria and enter a different one
	
	Go back to design view and show them how they can add a second criteria to narrow the search down, and even a third if required.
	
	Explain to them the importance of:
	   1. spelling the criteria exactly right
	   2. making sure the criteria is in the right field
	   3. clearing the criteria once they have completed one search and before they start another search
		7.5 mins

	Student activity Explain that they are now going to use the database to find their heroes and villains who will star in the new movie. Hand out a copy of 'choosing_your_cast.doc' Show them where to access 'choosing_your_cast.html' and explain that they must read about the film scenes so that they understand why they are looking for particular characteristics in the database. Tell them that they will probably have more than one option to choose from. They will need to look at all of the characters shown in the query results and then choose which one they think will be the most suitable. Hand out homework6.doc and explain what they need to do.	25 mins
Review/Summary At least 5 minutes before end.	Round up the project by going over everything that they have learned and checking that they understand why databases are so useful	5 mins

Extension work	Write a couple of scenes of their own and then search for the appropriate cast members.
Homework	Hand out a copy of homework6.doc
Materials required	Starter_crossword.doc Phone book/Yellow pages – couple of copies Filmcharacters.mdb Choosing_your_cast.doc Choosing_your_cast.html Homework6.doc

You may:
- Guide teachers or students to access this resource from the teach-ict.com site
- Print out enough copies to use during the lesson

You may not:
- Save this resource to a school network or VLE
- Adapt or build on this work

A subscription will enable you to access an editable version and save it on your protected network or VLE