













Quick View

There are 4 parts to this lesson:

1	Introduction: What is required from this unit	 
2	Understanding databases	   
3	Tables, forms, queries and reports	   
4	Plenary: Lesson review & data protection	 
	Homework: Looking at databases	

Delivery

1. Introduction: What is required from this unit

Introduce this unit, explaining what the pupils will experience and a possible outcome of their work.

The aim of this lesson is ensure that pupils have the knowledge and understanding about databases before starting the main tasks.

Develop this by asking pupils:

- What they understand a database is
- To give examples of databases and the type of information they may contain
- What databases can actually do apart from storing information

Show pupils the language cards **language1** for this lesson.

This lesson should be used to teach pupils the knowledge and understanding about databases before they start the associated tasks.

2. Understanding databases

It is important that pupils understand how a database organises its data, in particular records and fields.

Show the presentation, there are also **notes1a** to accompany it.

Group activity Show **presentation1a** on large screen

Individual Pupils access this from **activity 1 / start**

Give out the **worksheet1a** , pupils can complete this after watching the presentation.

3. Tables, forms, queries and reports

There are many database solutions available; this unit uses Microsoft Access 2000. Although an extremely powerful database compared to some, the work pupils will do mostly involves them using wizards or editing prepared data.

Pupils will therefore need to understand the basic objects (component parts) for Microsoft Access. This can be substituted if the school uses different software.

This part of the lesson introduces pupils to tables, forms, queries and reports. It does not show them how to use or create them; this starts in lesson 2, but shows them what they are.

Show the presentation, there is also a **notes1b** to accompany it.

Group activity Show **presentation1b** on large screen

Individual Pupils access this from **activity 1 / task**

Give out the **worksheet1b**, pupils can complete this while watching the presentation

4. Plenary: Lesson review & data protection

Review key points:

- Databases, their use and application
- Records and fields
- Tables, forms, queries and reports

Data Protection Act

Ask pupils how they feel about information being kept on a computer about themselves. Give examples, e.g. doctor, school, bank. Ask them who should be able to look at this information, what safeguards are in place?

Introduce the 'Data Protection Act' in a broad context. Tell pupils that data held on computers must comply with this. The Act is quite comprehensive and has 8 principles to follow.

At this stage, pupils should be aware of the Data Protection Act; they are not required to know its detail.

There is good web site that offers free resources about the Data Protection Act:

www.dataprotection.gov.uk (education and training) or phone 01625 545745

Discuss and set the homework.

5. Homework:

Give out **homework1**. This asks pupils to consider, in simple terms, the Data Protection Act and to answer some questions about it.

You may feel it appropriate to provide the homework sheet in electronic format for those pupils with computer access at home. Consideration should then be given to:

- How they would return the work and the style - electronic or printed
- Virus protection
- Authenticity of the work

Objectives

Finding Information, Communicating & Evaluating

Pupils should be able to:

- save files using appropriate file names and organise files in a hierarchical folder structure
- consider examples of electronic databases in everyday life
- recognise the risks associated with the sharing of personal information digitally and to take actions to protect themselves
- understand when to use ICT to solve a problem

Pupils should be taught to:

- Understand databases, their use and application.
- Know how databases organise their data.
- Understand that databases can be searched and information viewed and printed
- Understand the information held on computer should be secure.
- Know that there is a Data Protection Act.

Preparation

Have you:

- Identified the key elements of this lesson
- Understood the school ICT policy in the areas that may affect this lesson
- Thought about the seating arrangements for any large group demonstration
- Checked that the whiteboard or large screen has been set up
- Checked the Internet connection is working (to show the Data Protection site)
- Prepared any extra work to be used for differentiation
- Prepared any work that teaching assistants may require
- Looked at the sample demonstrations and are familiar with their content
- Prepared any key word displays

Required IT skills for this lesson: Demonstrations are available in the unit

Using a large screen / whiteboard
Showing a Powerpoint presentation

Differentiation & Extension

Consider the following for some pupils:

- A wall display showing how data is organised within a database, e.g. the relationship between records and fields
- A wall display showing the relationship between various database objects
- Example databases
- Wall display showing the 8 principles of the Data Protection Act
- Examples of data kept about us, e.g. doctor, police, school, clubs

The following resources are available to pupils. Printable versions are available by accessing the 'all resources' within each lesson. These may be useful for reinforcement, extension or general support.

- 2 Wordsets with audio support
- 2 Wordsearch activities
- 2 Interactive crosswords

Homework & Language

Homework:

Give out **homework1**. This asks pupils to consider, in simple terms, the Data Protection Act and to answer some questions about it.

You may feel it appropriate to provide the homework sheet in electronic format for those pupils with computer access at home. Consideration should then be given to:

- How they would return the work and the style - electronic or printed
- Virus protection
- Authenticity of the work

Language for learning:

table
database
object

form
user
structure

report
record

query
field

Resources

For this lesson:

You will need:

- Large screen display or whiteboard
- Access for pupils to **Unit 7.5 > Activity 1**
- Handouts
- Suitable database software, e.g. Microsoft Access

Teacher Resources:

These are accessed by opening the **Teacher Resources File** on the CD (or network).



By default, the teacher PowerPoint resources are linked to Microsoft 2000 files although Microsoft '97 and HTML versions are also available from within the resources folder. Pupils will access a PowerPoint Show.

Resource Description	Filename	Format
Language Cards	language1	Word PDF
Presentation on databases	presentation1a	PowerPoint
Notes on presentation	notes1a	Word PDF
Worksheet on databases	worksheet1a	Word PDF
Worksheet answers	answers1a	Word PDF
Presentation on Microsoft Access	presentation1b	PowerPoint
Notes on presentation	notes1b	Word PDF
Worksheet on Microsoft Access	worksheet1b	Word PDF
Worksheet answers	answers1b	Word PDF
Activity sheet	task1	Word PDF
Summary sheet	summary1	Word PDF

UNIT 7.5 LESSON 1

Homework sheet	homework1	Word PDF
Answer sheet	answers1	Word PDF

Pupil Resources:

These are accessed by opening the **Pupil Resources File** on the CD (or network).

Resource Description	Filename	Format
Pupil activity sheet	task1	Word PDF
Summary sheet	summary1	Word PDF
Worksheet on databases	worksheet1a	Word PDF
Worksheet on Microsoft Access	worksheet1b	Word PDF
Homework sheet	homework1	Word PDF