













Quick View

There are 3 parts to this lesson:

1	Introduction: Understanding data and data capture methods	    
2	Creating a data capture form	    
3	Plenary: Lesson review and setting homework	 
	Homework: Collecting data for 20 records	

Delivery

1. Introduction: Understanding data and data capture methods

Relevant tutorials for demonstrating the skills for this lesson can be found in the preparation section.

This lesson is about data capture. It is important that pupils are aware of the significant concerns over personal data and privacy including that of identity theft. They should understand that data capture forms can be sensitive and questions must be carefully thought about and relevant.

During the first 3 lessons pupils have only used a prepared example database.

The next 3 lessons require them to design and create their own database. This will contain data about some of the more obvious trades needed to build a house for their chosen famous person, e.g. bricklayer, carpenter, plumber, electrician, landscape gardener.

Pupils need to understand how this data will be collected and the form it will take.

Show pupils the presentation on data and data capture; there is **notes4a** to accompany it.

Give out **worksheet4a**

Group activity

Show **example4a** on large screen

Individual

Pupils can view the skills in **activity 4 / start**

Give out **handout4b** and explain what the pupils will be doing over the next 3 lessons.

In summary:

- Create a new database for their famous person so that they can select different tradesmen
- Design and create a data capture form
- Complete the data for at least 20 records
- Create the database with a table, form, query and report
- Show pupils the language cards **language4** for this lesson

2. Creating a data capture form

Explain to pupils that the design of the data capture form/questionnaire is important and a poorly thought out one may lead to data being recorded that is inconsistent and of little use.

Give out **handout4c** - this gives guidelines for creating a data capture sheet.

Give out **worksheet4d** - specifications that pupils need to follow when creating their own data capture sheet.

You may wish to demonstrate the creation of a simple A4 data capture sheet using Microsoft Word or similar.

Pupils then create their own data capture sheet and print one copy for homework or it could be e-mailed home and completed in electronic format.

They may wish to compare ideas using shared areas or other digitally shared methods.

3. Plenary: Lesson review and setting homework

Make sure that pupils have a data capture method.

Explain that they need to complete at least 20 records with a spread of trades.

Develop this by:

- Discussing where the information could be found, e.g. Yellow Pages, local papers

Homework:

Give out **homework4** - this gives guidance and reminders for gathering and completing their data capture sheet.

Pupils will need a print out of the data capture sheet or would have e-mailed it home to complete in electronic format.

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, Developing Ideas & Communicating

Pupils should be able to:

- save files using appropriate file names and organise files in a hierarchical folder structure
- identify the significant data required to solve a problem
- design a questionnaire or data-collection sheet to collect relevant data
- recognise the structure and format of data that can support checking and correcting to remove errors after entry; recognise that data may not be plausible and that this affects results
- recognise the difference between data, text and formulae in a computer model and organise these so that the model is fit for purpose
- recognise the limitations and opportunities of different layout formats and use these appropriately

Pupils should be taught to:

- Know the various data types used within a database.
- Understand that data types should be consistent within a database.
- Design a data capture system.
- Complete a data capture sheet.

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
- Prepared any extra work to be used for differentiation
- Prepared any work that teaching assistants may require
- Looked at the sample presentations and are familiar with their content
- Practised the skills required that need demonstrating
- Prepared any key word displays

Required IT skills for this lesson:

Using a large screen / whiteboard

Using Microsoft Word or other suitable software to create data capture forms

Differentiation & Extension

Consider the following for some pupils:

- Wall display showing types of data, e.g. text, number, data
- Examples of data capture forms, e.g. school forms, direct debit forms
- Wall display of the 8 principles of the Data Protection Act
- Examples of other methods used to input data into a database, e.g. OMR, light pen, fingerprint recognition
- Example data capture forms for use in the lesson

The following resources are available to pupils. Printable versions can be accessed in the 'all resources' within each lesson and are useful for reinforcement, extension or general support.

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

Homework & Language

Homework:

Give out **homework4** - this gives guidance and reminders for gathering and completing their data capture sheet.

Pupils will need a print out of the data capture sheet or would have e-mailed it home to complete in electronic format.

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:

numeric
data type

alphanumeric
questionnaire

data capture

Resources

For this lesson:

You will need

- Large screen display or whiteboard
- Access for pupils to **Unit 7.5 > Activity 4**
- Suitable word processing software, e.g. Microsoft Word
- Headphones / speakers

Teacher Resources:

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

Resource Description	Filename	Format
Language cards	language4	Word PDF
Presentation on data capture/data types	presentation4a	PowerPoint
Presentation notes	notes4a	Word PDF
Worksheet on data types	worksheet4a	Word PDF
Worksheet answers	answers4a	Word PDF
Handout explaining task for unit	handout4b	Word PDF
Handout on data capture guidelines	handout4c	Word PDF
Worksheet for completion of data capture form	worksheet4d	Word PDF
Activity Sheet	task4	Word PDF
Summary sheet	summary4	Word PDF
Homework sheet	homework4	Word PDF

Pupil Resources:

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

Resource Description	Filename	Format
Worksheet on data types	worksheet4a	Word PDF
Handout explaining task for unit	handout4b	Word PDF
Handout on data capture guidelines	handout4c	Word PDF
Worksheet for completion of data capture form	worksheet4d	Word PDF
Activity Sheet	task4	Word PDF
Summary sheet	summary4	Word PDF
Homework sheet	homework4	Word PDF