FACTFILE:
GCSE
DIGITAL TECHNOLOGY
Unit 1
SPREADSHEET APPLICATIONS 2

Introduction

Learning Outcomes

Students should be able to:

- Use a spreadsheet for data modelling
- Create, label and format charts
- Create a simple macro

What is Data Modelling?

A model is created to replicate a real-life situation. In a spreadsheet application, a model can be created using different functions and formula to see what impact a change in the data entered by the user may have on other data held in the spreadsheet. This can then be used to help users make important decisions.

For example, business users could assess the impact a change in unit price may have on their overall profit (what-if), or teachers could use a spreadsheet model to work out how many marks a student needs to achieve a particular grade, based on what they have achieved so far. Spreadsheets can also be used to forecast. For example, if sales of a product continue to grow at the same rate, what will sale be in 18 months' time? From this, future planning can then take place.
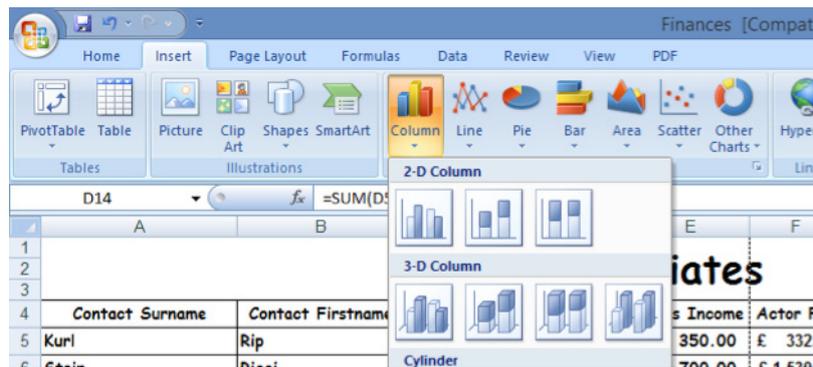
Charts

Spreadsheets display data in tabular form. Charts and graphs can be used to display data in a more visual way making it easy to read and to spot trends. There are different types of charts you can make. For example:

- Bar Chart
- Line Chart
- Pie Chart
- Scatter Graph

To create a graph, you first need to select the cells you wish to display. Highlight the area.
Tip: Use the control button [Ctrl] to highlight two separate ranges of cells.

Select the **'Insert'** tab and choose which chart type you would like to use. You can then use the **'Chart Tools'** tabs to make changes to the colours, titles, axis, legend etc.

Charts and graphs can be copied into other software applications such as word processing or presentation software. They can even be linked so charts will automatically update if any changes are made to the original.

Macro

A macro is a small program created to perform a repetitive task. It allows the user to perform a task by using the macro rather than having to enter the individual instructions. If the task is likely to be used many times it is much easier and more user friendly to use a macro.

It is a set of commands/instructions recorded together that can be activated by a mouse click or pressing a key. In simple terms it is a short cut to a task.

A macro is created by recording the tasks to be carried out. It is then named and saved. You can also write a macro using a script editor.

Activity

Using the Actor Associates spreadsheet you made for Fact File 1:

1. Create a graph showing the actors names and their gross income. Ensure the graph has an appropriate title and axes are labelled.
2. Set the print area from A1 to H14.
3. Create a macro to print the print area.

Bibliography

http://www.teach-ict.com/gcse_new/spreadsheets/spreadsheets/home_spreadsheets.htm

http://www.bbc.co.uk/schools/gcsebitesize/dida/using_ict/spreadsheetsrev1.shtml

https://www.youtube.com/watch?v=y4vitff25BU