Spreadsheet Modelling

1. What is a Spreadsheet?

A **spreadsheet** or **worksheet** is a file made of rows and columns that help sort data, arrange data easily, and **calculate numerical data**. What makes a **spreadsheet** software program unique is its ability to **calculate values** using **mathematical formulas** and the data in cells. You can use spreadsheets to enter data, calculate equations and create charts and graphs.

2. Modelling with Spreadsheets

Computer models of mathematical data, such as budgets, are usually done using a spreadsheet application that processes and performs calculations on the data entered by the user.

3. Workbook

A spreadsheet **workbook** is made up of many sheets. You can enter data on any of these worksheets and **link** the data together.

You can tell which sheet you are working on by looking at the tabs at the bottom of the window.

4. Active Cell

The **Active Cell** is the cell that is being worked in at the moment.

5. Cell Reference

A **cell reference** is made up of the column letter followed by the row number e.g. D8.

6. Formula

A **formula** is a calculation in a spreadsheet. It uses the **cell references** instead of the values contained in the cells.

Formulas are usually simple calculations, e.g. adding two or more numbers together. They always start with an equals sign **(=).**

7. Functions

Functions make more complex calculations.

Function	Description
8. SUM	adds values in selected cells
9. MIN	finds smallest value
10. MAX	finds largest value
11. AVERAGE	finds the average value
12. COUNT	counts how many of the selected cells have numbers in them

Charts and Graphs

Charts and graphs provide a visual representation of data, which can often be easier to understand.

There are several types of charts. Choose a chart based on the type of data to be displayed.

Type	Description
13. Line	Shows changes over time
14. Pie	Shows proportions of a whole amount
15. Bar	They are commonly used to compare several categories of data.

Find out more

Homework