

Unit: 4.8

Hardware Investigators

Key Learning

- To understand the different parts that make up a computer.
- To recall the different parts that make up a computer.

Key Resources







2Connect

What is the difference between hardware and software?

Key Questions

Hardware refers to the physical parts of a computer or device. The parts inside the computer casing are often called the components. The parts that are attached to the computer case are called peripherals. Software describes the programs that run on the computer.

Key Vocabulary

Motherboard

A printed circuit board containing the main parts of a computer or other device, with connectors for other circuit boards to be slotted into.

CPU

The part of a computer in which operations are controlled.

RAM

Allows programs to store information to help the computer run more quickly.

Graphics card

A printed circuit board that controls the output to a display screen.

Network card

An electronic device that connects a computer to a computer network.

Monitor

A screen which displays an image generated by a computer.

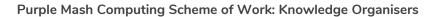
Speakers

A device for letting you hear sounds generated by the computer.

Keyboard and mouse

External input devices.







Unit: 4.8Hardware Investigators

Key Images



Motherboard



CPU



RAM



Graphics card



Network card



Monitor



Speakers



Keyboard



Mouse





Key Learning

- To format cells as currency, percentage, decimal to different decimal places or fraction.
- To use the formula wizard to calculate averages.
- To combine tools to make spreadsheet activities such as timed times tables tests.
- To use a spreadsheet to model a reallife situation.
- To add a formula to a cell to automatically make a calculation in that cell.

Key Resources





Key Vocabulary

Average Function

A feature that allows a user to find the average values of selected cells..

Advance mode

A mode of 2Calculate in which the cells have references and can include formulae.

Copy and Paste

A way to copy information from the screen into the computer's memory and paste it elsewhere without retyping.

Columns

Vertical reference points for the cells in a spreadsheet.

Cells

An individual section of a spreadsheet grid. It contains data or calculations.

Charts

Use this button to create a variety of graph types for the data in the spreadsheet.

Equals tool

Tests whether the entered calculation in the cells to the left of the tool has the correct answer in the cell to the right of the tool.

Formula

Use the formula wizard or type into the formula bar to create a formula in a cell, this will calculate the value for the cells based upon the value of other cells in the spreadsheet.





Formula Wizard

The wizard guides you in creating a variety of formulae for a cell such as calculations, totals, averages, minimum and maximum for the selected cells.

Move cell tool

This tool makes a cell's contents moveable by drag-and-drop methods.

Key Vocabulary

Random tool

Click to give a random value between 0 and 9 to the cell.

Rows

Vertical reference points for the cells in a spreadsheet.

Spin Tool

Adds or subtracts 1 from the value of the cell to its right.

Spreadsheet

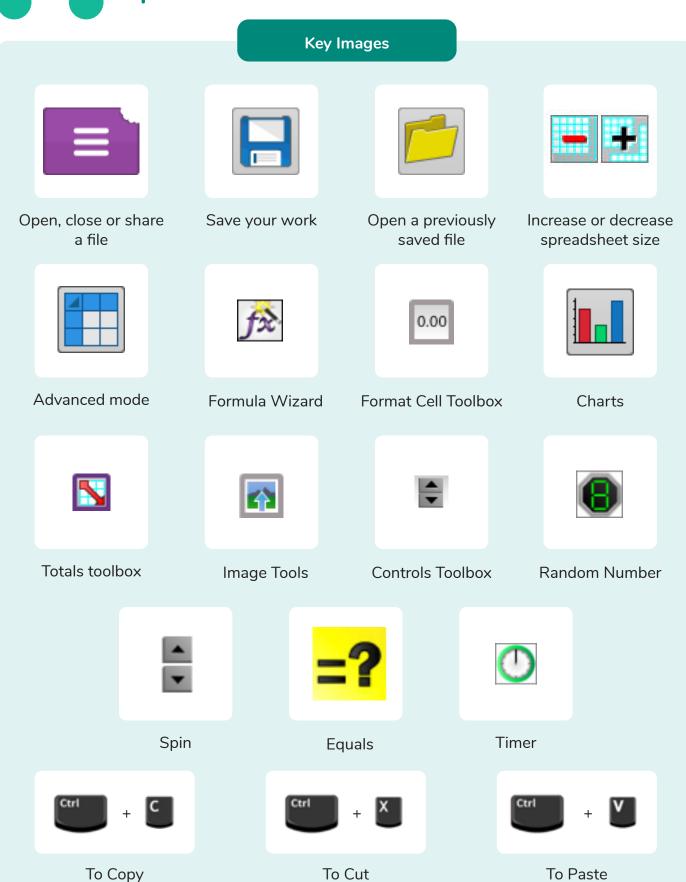
A computer program that represents information in a grid of rows and columns. Any cell in the grid may contain either data or a formula that describes the value to be inserted based on the values in other cells.

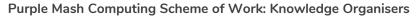
Timer

When placed in the spreadsheet, clicking the timer adds 1 to the value of the cell to its right every second until it is clicked again.











Key Questions

How would you add a formula so that the cell shows the percentage score for a test?

Click on the cell where you want the percentage score to be displayed then click the formula wizard button. Click on the cell that contains the score. Choose the ÷ operation then click on the cell that shows what the test was out of. Click OK. Click on the answer cell and then the formet cell button. Choose % as the format.

Which tools would you use to create a timed times tables test in 2Calculate?

You could use the random tool, the spin tool, the equal tool and the timer tool.

Give an example of the data that could be best represented by a line graph.

Data where both axes will contain continuous data so that you can see trends in the data. Such as ages and heights, time and temperature, years and costs.

Explain what a spreadsheet model of a real-life situation is and what it can be used for?

It represents the data of a situation for example budgeting for a party, working out how big a field needs to be for a certain number of animals, working out how to spend your pocket money over time.

