Kemnal Technology College – Computer Science Kemnal Key – Year 8 Term 5

KEMNAL KEY QUESTIONS

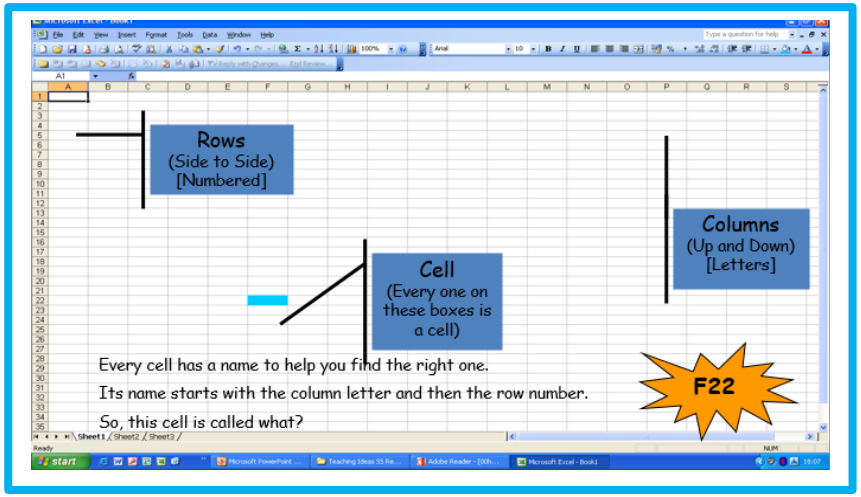
1. What is a Spreadsheet?
2. What are they used for?
3. What can a spreadsheet do?
4. What is meant by the term 'Computer Model'
5. What is the difference between a model and a simulation?

Modelling and simulation

In computing, modelling is used to look at large amounts of data to help with scientific or engineering projects. Simulations are used to graphically represent how things might look and feel.

A computer model is a representation of a real-life system or situation, such as the workings of a nuclear reactor or the evacuation of a football stadium.

A spreadsheet model could be used to plan a school prom. To make sure it came in on budget the spending on food, drinks, entertainment, and the price of tickets could be varied.



Spreadsheets are used to store information and data. Once we have our information in a spreadsheet we can run powerful calculations, make graphs and charts and analyse patterns.

A Spreadsheets appears as a grid, each row has its own number and each column its own letter.

This labelling of rows and columns is used to give each cell a cell address or reference, for example, C5 means column C, row 5.

Capacity

Size	Unit
8 bits	1 byte (B)
1,000 bytes (1,000 B)	1 kilobyte (KB)
1,000 kilobytes (1,000 KB)	1 megabyte (MB)
1,000 megabytes (1,000 MB)	1 gigabyte (GB)
1,000 gigabytes (1,000 GB)	1 terabyte (TB)

Boolean Logic

Logical operations operate on statements that are **true** or **false**. There are three fundamental logical operations:

not (inversion)
and (conjunction)
or (disjunction)

left	right	open left or right
false	false	false
false	true	true
true	false	true
true	true	true

Command	Description
turtle.circle(radius)	Draw a circle with given radius.
turtle.shape("turtle")	Sets the turtle shape to turtle.
turtle.undo()	Undo (repeatedly) the last turtle action(s)
turtle.clear()	Erases all drawings that currently appear in the graphics window.