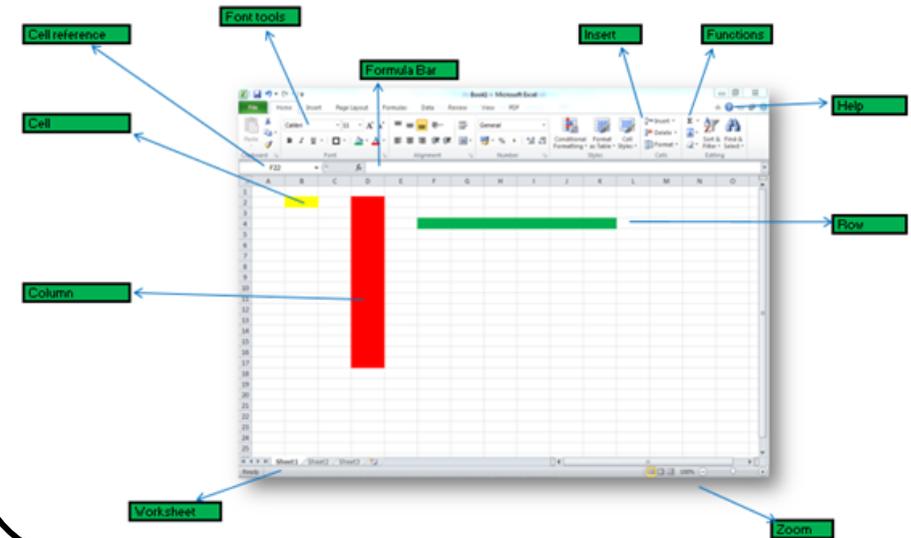# Spreadsheets —Knowledge Organiser

Why do we use Spreadsheets?

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.

Uses of spreadsheets:

- Budget tracker
- Stock tracking of a business
- Money use in a business
- Teacher may use it to keep a record of students grades

Layout of a Spreadsheet

Font tools Cell reference Formula Bar Insert Functions Help Cell Row Column Worksheet Zoom

Cell reference

A cell reference is the name given to a cell to uniquely identify it. E.g. E4

An **absolute cell reference** ensures that 1 cell always remains constant even when autofill is used.
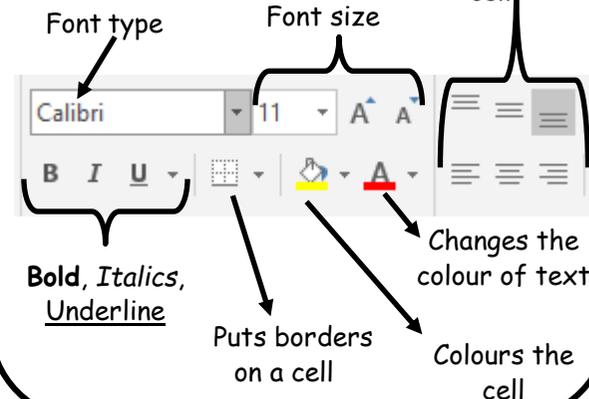
E.g. E4

Sort & Filter

Sorting data organises it in a specific way e.g. alphabetically

Filtering data makes it easy for us to find one specific piece of data without having to look through every piece of data

Formatting Cells

Font type   Font size   Changes the way text is displayed in a cell

Calibri   11   A A

B *I* U

Bold, *Italics*, Underline

Puts borders on a cell

Changes the colour of text

Colours the cell

Formulas

Only use when creating a calculation between 2 cells.

E.g.

= A1 + B1 (adds)

= A1 - B1 (subtracts)

= A1 * B1 (multiplies)

= A1 / B1 (divides)

Functions

Click on this button to insert a function

SUM
AVERAGE
MIN
MAX
IF
COUNTIF
COUNT

Click on the function you need or type it in to find it

Graphs

Insert

Click on the insert tab at the top of Excel

Pick the chart that you need:

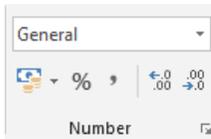Recommended Charts | Maps | PivotChart

Charts

Autofill

Click on the cell you want to duplicate, grab the black cross in the bottom right-hand corner and drag it down to the remaining cells.

Data Types

You can format the cell to match the type of data you are inputting.

General

% ,

Number

General — No specific format
123 Number
12
Currency
Accounting
Short Date
Long Date
Time
% Percentage
1/2 Fraction
10² Scientific
ABC Text

More Number Formats...

Click on the arrow where it says general, then from the options given select the right data type for your data.
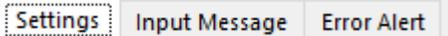
Data Validation

Data

Click on the Data tab at the top of Excel
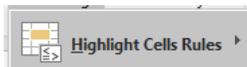
Click on this button to get the data validation window

Use these headings to set up your data validation.

Settings | Input Message | Error Alert

Conditional Formatting

Conditional Formatting

Click on this button to add conditional formatting

Highlight Cells Rules

Then click on highlight cell rules, depending on what your rule is select the next option that matches the rule you want to create.

Keywords

Formula	Worksheet	Cell	Cell Reference	Borders
an expression which calculates the value of a cell	a collection of cells organized in rows and columns	a box in which you can enter a single piece of data.	is the name given to a cell to uniquely identify it. E.g. E4	form an edge along or beside (something)
Autofill/Fill Handle	**Data Validation**	**Spreadsheet**	**Function**	**Formatting**
a software function that automatically enters data in spreadsheets	restrict data entry to certain cells, it displays an error message when a user enters invalid data.	an electronic document in which data is arranged in the rows and columns of a grid and can be used in calculations.	a predefined formula that performs calculations using specific values in a particular order.	To change the appearance, layout or organisation of a spreadsheet
Sort	**Filter**	**Graphs/Charts**	**Conditional Formatting**	**Data types**
the arrangement of data into a specific sequence. E.g. A-Z, smallest to highest	to allow only certain data to be displayed.	a visual representation of data from a worksheet that can bring more understanding to the data than just looking at the numbers.	a feature of Excel which allows you to apply a format to a cell or a range of cells based on certain criteria.	a particular kind of data item, as defined by the values it can take, e.g. Numbers, text, date
Ascending	**Descending**	**Absolute Cell Reference**	**Column Heading**	**Rows**
arranged in a series that begins with the least or smallest and ends with the greatest or largest	arranged in a series that begins with the greatest or largest and ends with the least or smallest	A cell reference that does not change when the cell is moved, copied or filled	is the grey-coloured row containing the letters (A, B, C, etc.) used to identify each column in the worksheet.	the range of cells that go across (horizontal) the spreadsheet/worksheet.
Profit	**Columns**	**IF statement**	**VLookUp**	**Macro**
a financial gain, especially the difference between the amount earned and the amount spent in buying, operating, or producing something.	a vertical series of cells in a chart, table, or spreadsheet.	The Excel IF Statement tests a given condition and returns one value for a TRUE result and another value for a FALSE result.	'Vertical Lookup'. It is a function that makes Excel search for a certain value in a column (the so called 'table array'), in order to return a value from a different column in the same row.	an action or a set of actions that you can run as many times as you want. When you create a macro, you are recording your mouse clicks and keystrokes.