

7.4 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.

CALCULATIONS USING BASIC FORMULAE

	A	B	C	D
1				
2		6	3	
3				
4	Add	+	=B2+C2	9
5	Subtract	-	=B2-C2	3
6	Divide	/	=B2/C2	2
7	Multiply	*	=B2*C2	18

ABSOLUTE & RELATIVE CELL REFERENCING

Using the \$ symbol to fix part of a formula onto a single cell.

Absolute reference			Relative reference		
B3	:	= $\$A\$1+5$	B3	:	=A1+5
1	A	10	1	A	10
2		9	2		9
3		8	3		8
4		7	4		7
				B	
				15	
				15	
				15	
				12	

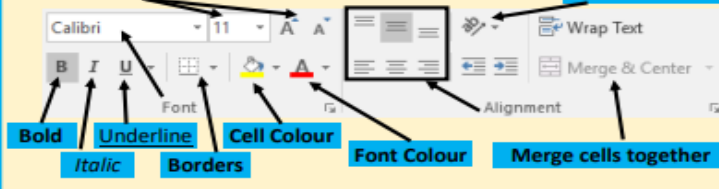
EXAMPLE FUNCTIONS IN EXCEL

	A	B	C	D	E	F	G
1							
2		10	Function	Description		Example Use	Answer
3		20	SUM()	Adds all the numbers in a range of cells.		=SUM(B2:B9)	210
4		30	AVERAGE()	Works out the average of the numbers in a range of cells.		=AVERAGE(B2:B9)	26.25
5		40	MAX()	Shows the largest number in a range of cells.		=MAX(B2:B9)	50
6		50	MIN()	Shows the smallest number in a range of cells.		=MIN(B2:B9)	10
7		10	COUNT()	Counts the number of cells in a range that contain numbers.		=COUNT(B2:B9)	8
8		20	COUNTIF()	Counts the number of cells in a range that meet a given condition.		=COUNTIF(B2:B9,10)	2
9		30	IF()	Checks if a condition is met and returns one value if TRUE and another value if FALSE.		=IF(B9>50,"Yes","No")	No

EXCEL DATA TYPES

123	General	No specific format	Time
12	Number		Percentage
£	Currency		Fraction
Accounting			Scientific
Short Date			Text
Long Date			

EXCEL FORMATTING TOOLS



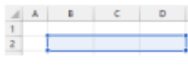
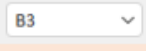
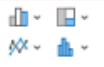



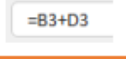
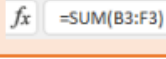
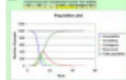
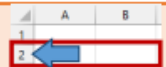
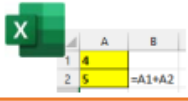
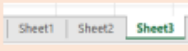
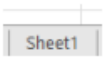


Operator	Meaning	Example	Result
=	Equal to	=G5=10	FALSE
<>	Not equal to	=G5<>"red"	TRUE
>	Greater than	=G5>100	FALSE
<	Less than	=G5<100	TRUE
>=	Greater than or equal to	=G5>=75	TRUE
<=	Less than or equal to	=G5<=0	FALSE

Value: 85
Cell G5

LOGICAL OPERATORS

Key Vocabulary

Active Cell	The cell you have selected and are currently on.	
Cell	A rectangular box in a worksheet that can contain data.	
Cell Range	A collection of selected cells . For example (B2:D2).	
Cell Reference	A name given to each cell made up of the column letter and row number of that cell.	
Chart	A graph - used to show data in a visual way.	
Column	A vertical collection of cells . Each column has a letter to represent it.	
Data Type	The type of value being stored in a cell .	
Formatting Tools	A set of tools that allow the style of a cell to be changed.	
Formula	A set of instructions to be carried out.	
Function	A named formula built into a spreadsheet to perform a task.	
Modelling	Using a computer to predict and investigate a real life situation.	
Row	A horizontal collection of cells . Each row has a number to represent it.	
Spreadsheet	A computer program (software) that shows information in a grid of data where calculations can be performed.	
Workbook	A spreadsheet file made up of worksheets .	
Worksheet	A single page within a workbook .	

Other uses for spreadsheets –

- Modelling and Planning
- Home/Business Finance and Budgeting
- Wages/Invoices
- Predictions / Simulations / Calculations
- Creating charts and graph