

Office Basics 2023







1. Introduction
2. Entering Data
3. Simple Formulas
4. Formula Shortcuts
5. Formula Practice
6. Cell Formatting
7. Number Formatting
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Task 1 – Uses of a spreadsheet

Microsoft Excel is a spreadsheet application used to organise data in tables, perform calculations and create charts. Make a list of three tasks that could be completed using a spreadsheet. Look on the web if you are short of ideas.

а.	 	
b.		
с.		

Task 2 – Cells and data types

When you enter data in Excel you are creating a spreadsheet. The rectangles covering the screen are called **cells**. The cell with the thick border is called the **active cell**. The active cell is the one that your data will appear in when you type. Each cell has a **cell reference** given by the **letter** above the cell, followed by the **number** to the left of the cell.



Use the picture of a spreadsheet on the right to answer the questions.

а.	What item of data is found in cell A2?
b.	Which cell is the active cell?
с.	Which cell contains a date ?
d.	Which cell contains currency data?
e.	Which piece of data is found in cell A1 ?
f.	Which cell contains a number ?
g.	Which cell contains text ?
h.	Which cell contains a percentage?



Note: Text, number, date, percentage and currency are known as data types.

Task 3 – Entering data

a. Open the Microsoft Excel application and click on the **Blank** workbook icon. A workbook is a spreadsheet file.

A new blank page appears called a **worksheet**. When you open Excel the active cell has the reference **A1**.





Task 3 – Entering data (cont.)

- **b.** Type the letter '**a**' using the keyboard, then press the **Enter** key to move to the cell below.
- c. Type the letter 'b' then press the Enter key again. Continue up to the letter 'e'.
- d. Click on cell **B1** with your <u>mouse</u> to select it, then enter letters '**f j**' as shown.
- e. Use the <u>arrow keys</u> to navigate back up to cell **C1** then enter letters '**k-o**' in the third column.
- f. To save the page, click **File** in the top left corner then **Save** from the list that appears below. Your teacher will show you a suitable place to store your work. Click **Browse** to locate this.
- g. Type 'EB Introduction' into the *File name* box and click the **Save** button.

File name:	EB - Introduction
Save as type:	Excel Workbook (*.xlsx)

Task 4 – Ranges

а.

b.

с.

d.

е.

f.

g.

A range is a group of two or more adjacent cells. The range is described by the top left cell reference, followed by a colon and then the bottom right cell reference. The range of cells selected below is **A2:B4**.

1. Click on the cell A2 and hold the mouse button down	1 2 3 4 5 6	A a c d e	f g h i	B	k I m n o	c		2.	Dra poir and but	ng ti nte d re tor	he mo er to c lease	ouse ell B the	9 64		
Select the range in your spread	she	et using th	ne in	structi	ions	above									
Which letters can be found in t	he r	ange A2:E	84 ?					b, c,						_	
Which letters are found in the	rang	ge A1:C2 ?													
Which letters are found in the	rang	ge B1:B4 ?													
What is the smallest range that	: hol	lds the let	ters	a and	b ?										
What is the smallest range that	: hol	lds the let	ters	g, h, l :	and i	m?									
More complicated ranges can b	oe se	elected by	holo	ding de	own	the Ct	rl			1	А			В	
key and clicking with your mou want to select. Try this now.	se o	n each ce	ll or	range	that	you				1	a b		f ø		k
,										3	с		h		m
										4	d		i		n

	Α	В	С
1	а	f	k
2	b	g	1
3	с	h	m
4	d	i	n
5	e	j	o

Formulas make a spreadsheet application a very powerful tool. They are mathematical sums that can be used to:

- Carry out additions, subtractions, multiplications and divisions.
- Find the total of a group of numbers.
- Find the average, maximum or minimum of a set of numbers.

All the numbers in red in the spreadsheet on the right are the result of calculations. Formulas have been entered into each cell.

Note: The word 'formulae' is often written as the plural of 'formula', but to be consistent with Excel we have used the US spelling 'formulas'.

Task 1 – Addition

- a. Open your '**EB Bicycles**' workbook in Microsoft Excel. If you didn't complete that task then copy all the data in <u>black</u> from the spreadsheet above. Do not copy the data in red.
- b. To find the total number of red bicycles, make cell D4 the active cell and type the formula =B4+C4. You may notice some coloured borders appearing as you type.

-					
3	Style	Store 1	Store 2	Total	
4	Red	25	9	=B4+C4	
5	Blue	45	17		

c. Press the Enter key to display the result.



Note: All formulas begin with an equals symbol. The coloured boxes show which cells are being used.

d. With cell D5 the active cell, use the method below to create the formula =B5+C5

Type an *equals* sign... Click on cell B5... Type a *plus* sign... Click on cell C5.

e. Use either method to complete the calculations in cells D6, D7 and D8.

	Α	В	С	D
1	Bicycle Inv	entory		
2				
3	Colour	Store 1	Store 2	Total
4	Red	25	9	34
5	Blue	45	17	62
6	Green	30	14	44
7	Black	28	11	39
8	Silver	42	15	57
9	Total	170	66	236





1. Introduction	
2. Planning	
3. Creating the Datab	ase
4. Entering Data	
5. Sorting Data	
6. Filtering Data	
7. Forms	
8. Reports	
9. Quiz	
10. Quiz Split	



Task 1 – The database file

- a. Open Microsoft Access and click on Blank Database.
- **b.** Type an appropriate file name into the *File Name* box and click on the folder icon to select a location for your new database.





- c. Click on the **Create** button. Your database will open with a new table presented in *Datasheet View*.
- d. Close the *application* by clicking on the cross in the top right of the screen. Your database has already been saved so you won't be prompted about this.



e. Open Access again. Your database should be in the list. Click on the name to open it. If it is not in the list then click **Open** and locate your database file.





Look in the list for your database

f. At *times*, you may notice a yellow security warning under the ribbon (the row of icons along the top of the screen). Databases can hold damaging computer code so you should be careful when using them. If you are sure that your database is from a safe source then click **Enable Content**.





Task 2 – Data types recap

Before we create our first database table, we will look again at some of the words we will be using. State the meaning of each of the terms below:

a.	Data
b.	Database
с.	AutoNumber
d.	Short Text
e.	Number
f.	Currency
g.	Date/Time
h.	Yes/No
i.	Table
j.	Field
k.	Record
Ι.	Form
m.	Report

Task 3 – Entering the field information

For this task, you will need the list of the field names that you intend to use in your database.

- a. Open your database in Access. Select the **Create** tab in the ribbon then click on the **Table** icon in the **Tables** group of icons (we'll use the shorthand '**Create / Tables / Table**' for this type of instruction in future).
- **b.** The new table will be displayed in *Datasheet View*. We can use this view to enter our field names and select the field types. The first field will be set up automatically, named 'ID' and set as *AutoNumber*.
- **c.** Double-click on the field name **ID** and change it to the *AutoNumber* field from your plan (we've used *Member_ID*).
- d. Our next field will be called 'Last_Name' with a field type of Short Text. Yours may be different. Click the Click to Add heading above the second column and select your data type from the list. Name the field as planned.

	Member_ID +	Click	to Add 📼
¥	(New)	AB	Short <u>T</u> ext
		12	Number

Note: With up to 255 characters, Short Text provides enough space for most text fields. You may select Long Text if you need more.

e. Repeat this procedure until you have added all the fields from your list. See the instructions on the next page if you make a mistake.



Reports allow you to display and print selected data in a professional manner. Access can produce a report with the click of a button. As with forms, the *Layout View* gives you some control over the design.

Task 1 – Creating a report automatically

- a. Select your *Members* table from the *Navigation Pane* on the left and click 'Create / Reports / Report'.
- **b.** Access will automatically create a report which includes all the fields in your table. It probably stretches across several pages.

Members1					
Members	5		Friday, :	28 April 2023 4:21:31 PM	
Member_ID	Last_Name	First_Name	DOB	Age	Add
1	Collins	John	3/07/1998	15	149
2	See	Jenny	24/05/1998	15	3 E(
3	Tran	Li	13/03/1999	13	44 (
4	Lester	Dayner	12/12/1998	15	6 Fi



The initial report includes all fields and extends across several pages.

Delete

Delete Row

Delete Colum

First Name

John

Jenny

>

Change To

 \times

Members

Last Name

Collins

See

c. The report opens in *Layout View*. From this view, you may edit the field names, remove fields and format the results.

Right click on an unwanted field heading and select **Delete Column**.

d. Repeat the delete process until your report only displays a few fields. Ours shows the Last_Name, First_Name, Age and Position fields. Yours may be different.

Note: You may select across columns and delete them together.

e. You may switch the position of columns. Right click anywhere in a column and choose **Select Entire Column** from the list. Drag any of the orange boxes and drop them in a new location.

				Tran	Li	
				Lester	Dayner	
Member	S			Cooper	Rebecca	
				Stewart	Robert	
First_Name	Last_Name	Age	Position	ļ.		
John	Collins	15	Treasurer			
Jenny	See	15				



Match each term on the left to the correct definition on the right.

1	Data	•	 An organised collection of data
2	Database	•	 A collection of records shown in rows and columns
3	Table	•	 The bar along the top of the table or form
4	Title Bar	•	 Information, instructions, facts and figures
5	Field	•	 A view showing the rows and columns of data in a table
6	Field Name	•	 Data about a single person or place etc. occupying one row
7	Record	•	 The name of a field, shown as a column heading in datasheet view
8	Datasheet View	•	 A column of data, such as name, age, or date of birth
9	Data Type	•	 Data that involves amounts of money
10	AutoNumber	•	 The type of data in a field (e.g. text, number)
11	Text	•	 Data that includes numbers only
12	Number	•	 A field that is completed automatically by the database
13	Currency	•	 Data that includes letters and numbers
14	Date/Time	•	 A small box for you to place a tick into
15	Yes/No	•	 The collection of icons along the top of the screen
16	Check Box	•	 Data that offers only 2 possible choices
17	Format	•	 Data holding information about the date or time
18	Ribbon	•	 The way that dates or numbers are displayed
19	Tab	•	 To rearrange data in some order
20	View Icon	•	One collection of icons in the ribbon
21	Sort	•	 The button which switches between different views
22	Sort Ascending	•	To turn a filter on and off
23	Sort Descending	•	 To remove some records from display
24	Filter	•	 To rearrange data starting with the biggest, highest or latest
25	Toggle Filter	•	 To rearrange data starting with the smallest, lowest or earliest
26	Clear All Filters	•	 To filter out all records that have not been selected
27	Filter by Selection	•	 A view allowing you to display and edit a single record
28	Form	•	 The fields that you would like to appear in a form or report
29	Form Name	•	 To remove all filters and display all records
30	Selected Fields	•	The name given to a form
31	Drag and Drop	•	 A view that enables you to shift or delete fields easily
32	Background Colour	•	The name given to a report
33	Report	•	 To click and hold down your mouse button, then move an object
34	Report Name	•	 A professionally displayed selection of data
35	Layout View	•	 The colour of the areas surrounding the fields in a report

Word Basics





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2023



1. Typing Text
2. Deleting Text
3. Selecting Text
4. Editing Text
5. Font and Alignment
6. Bold, Italics and Underlining
7. Basic Tabs
8. Bullets and Numbering
9. Header and Footer
10. Quick Styles
11. Spell and Grammar
12. Printing
13. Practice Tasks
14. Quiz
15. Quiz (Split Version)



Once we have learned to select text, it is very easy to copy or move it to a new place in your document. We are going to use the **Cut**, **Copy** and **Paste** icons. These are found in the **Clipboard** group under the **Home** tab of the ribbon.

	The Home	e Tab	
Hor	me		
り・ ひ P	aste	$ \begin{array}{c c} \hline \text{Calibri (Body)} & & \hline 11 & & A^{*} & A^{*} & Aa \\ \hline \textbf{B} & I & \underline{U} & \sim ab & \textbf{x}_{2} & \textbf{x}^{2} \\ \hline \textbf{A} & \sim & \underline{\mathscr{A}} & \sim & \underline{\mathscr{A}} & \sim \\ \hline \textbf{A} & \sim & \underline{\mathscr{A}} & \sim & \underline{\mathscr{A}} & \sim \\ \hline \textbf{A} & \sim & \underline{\mathscr{A}} & \sim & \underline{\mathscr{A}} & \sim \\ \hline \textbf{A} & \sim & \underline{\mathscr{A}} & \sim & \underline{\mathscr{A}} & \sim & \underline{\mathscr{A}} & \rightarrow \\ \hline \textbf{A} & \sim & \underline{\mathscr{A}} & \rightarrow & \underline{\mathscr{A} & \rightarrow & \underline{\mathscr{A}} & \rightarrow & \underline{\mathscr{A} & \rightarrow & \underline{\mathscr{A}} & \rightarrow & \underline{\mathscr{A} & \rightarrow & \underline{\mathscr{A}} & \rightarrow & $	The Ribbon
Undo	Clipboard	Font	

Task 1 – Cut and paste

- a. Open your file 'WB Text' in Microsoft Word. If you do not have this file then work in a blank document.
- b. Start a new paragraph and type out Passage 1 on two lines.



- c. Select the word '**One**' by double-clicking with the left mouse button.
- d. Click on the Cut icon in the Home tab ('Home / Clipboard / Cut').
- e. Place the cursor after the word '**Ten**' and click on the **Paste** icon. The numbers should now appear in the order shown below (notice that Word adds a space for you between 'Ten' and 'One').

Two Three Four Five Six Seven Eight Nine Ten One

f. Select the words 'Two Three' using your mouse pointer. Cut the words and paste them after the word 'Five'. The numbers should now appear like this:

Four Five Two Three Six Seven Eight Nine Ten One



Sometimes, you may not want to start typing at the lefthand edge of the page. Tabs can be used to move the text away from the lefthand side.

	→	Tabs allow you to indent paragraphs like this.	
			Or even
1			like these

The easiest way to include tabs is to use the **Tab** key.

The Keyboard		
Tab 🖛	Exe F1 F2 F3 F4 F5 F8 F7 F8 F9 F10 F11 F12 1 9 * 9 * 9 * 9 * 9 F11 F12 Tab 9 * 9 * 9 * 9 * 9 F11 F12 Tab 9 * 9 * 9 * 9 * 9 1 9 * 1 <td< th=""><th>Mitter Database Mitter Standi Mitter Mitter Mitter<</th></td<>	Mitter Database Mitter Standi Mitter Mitter Mitter<

Task 1 – Using the tab key to indent text

- a. Open the file 'WB Text' or use a new blank document. Start a new paragraph.
- b. Press the **Tab** key twice and type Passage 1a. If you accidentally press the Tab key three times, use the **Backspace** key to delete the last tab space.

Passage 1a	
	This text has been indented by pressing the Tab key twice.

c. Press the Enter key to start a new paragraph then use the Tab, Shift and Enter keys to create the letterhead shown in Passage 1b. The date should be on the left and the tab key used to move the name and address over to the right.



Note: It is no longer common to place your address in the top right. This is for Tab skills only.



Word enables you to produce professional looking documents easily. The *galleries* display several styles that can be adopted with a single click of the mouse. One example of a gallery can be found on the **Home** tab.

The Style Gallery	(on the H	ome tab)						P
- ☲ ☲ 2↓ ¶ 葉☰ - ☆ - ⊞ - raph 「5	Heading	Heading Title	Heading 3	Heading 4	Heading 5	Normal	No Spacing	Find Control Fi
2 - 1 - 3 - 1 - 4 - 1 - 5 -	Quote	I ICIE	Subtitle SUBTLE REFERE	Subtle Emphas	Emphasis Book Title	List Paragraph	Strong	

If you select some text then place your mouse pointer over a few of the different styles, you will notice that the appearance of the text changes. This displays the result of the formatting and is called a *live preview*. You can use the live preview to experiment with all kinds of fonts and styles.

Task 1 – Using the styles, galleries and other options

a. Open a new, blank document by clicking on File, selecting New then clicking on the Blank document option.

Note: You may also use the keyboard shortcut 'Ctrl + N'.

- b. Type the title 'Using the Styles Galleries' and press the Enter key to start a new paragraph. Do not format the title in any way.
- c. For this task, you will need a page and a half full of text. It doesn't matter what the text says, so simply write a sentence then copy and paste it until about a page and a half is full.



Using the Style Galleries

This is a page full of text that doesn't mean anything. This is a page full of text that doesn't mean anything. This is a page full of text that doesn't mean anything. This is a page full of text that doesn't mean anything. This is a page full of text that doesn't mean anything. This is a page full of text that doesn't mean anything. This is a page full of text that doesn't mean anything. This is a page full of text that doesn't mean anything.

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PowerPoint Basics





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1. Introduction
2. Formatting Text
3. Animation
4. Pictures
5. Colour
6. Transitions and Arrangement
7. Spell Check
8. Printing and Presenting
9. Quiz
10. Quiz (Split Version)



When giving a presentation, displaying all the points on a slide in one go can be confusing. Your audience will not know whether to read or to listen and might end up doing neither.

It is a great idea to display one fact at a time. The PowerPoint then reinforces your presentation rather than distracts from it. Animations can introduce lines of text and images to the screen one by one. When presenting, you will have control over when the PowerPoint moves to the next piece of text.

Animation effects include:

- Subtle effects e.g. making text gradually appear out of nothing.
- Moderate effects e.g. making text appear from below and moving it upwards.
- Exciting effects e.g. making text fly into the screen.

You can easily set animation effects to occur at the following times:

- Entrance When the object is introduced to the slide.
- **Emphasis** At some point during the viewing of the slide.
- Exit When the object is removed from view.

Task 1 – Adding basic animation

- a. Open your 'PB Basics' presentation and select the title box.
- **b.** Open the **Animations** tab and click on the arrow in the bottom right of the *Animation Gallery* (see right).



c. Select one of the green *Entrance* effects.

None $\overrightarrow{}$ None Entrance 沷 X Fly In $\widehat{\mathbf{x}}$ X X 23 W Fade Float In Wipe Shape Wheel Random Bars Appear Split OW & TI Wheel Emphasis Text or object rotates around a central hub and gradually comes 2 2 2 2 into view V 1 X Lighten Pulse Grow/Shrink Transparency Object Colo... Complen Teeter Desaturate Darker Spir × 佥 淤 B A Font Colour **Bold Flash Bold Reveal** Underline Wave

Animation (page 2)



Task 1 – Adding basic animation (cont.)

d. With the title box still selected, click 'Animations / Animation / Effect Options' and look through the options for your chosen effect. Select one of these options if you wish.

plit	X Wipe	A Shape	* Wheel	Random Bars	Grow & Turn	Zoom	*	Effect Options •	Add Animation •	∛ Animation Pane ∮ Trigger • ☆ Animation Painter	 Start: On Duration: Delay: 	Click 02 00
	Animation							Spokes		iced Animation		
2 · 1 ·	11 · · · 10 · · · 9	8 7 .	6 5 .	··4···3·	2 1	0 • • • 1 •	1 · 2	1	Spoke	.6.1.7.1.8.1	9 · · 10 · · ·	11
									2 Spokes			
					1				Spokes			
						-			L Spokes			
_								NZ .				

- e. Press the **F5** key to view your presentation. You should see that the three facts and the picture are present, but not the title.
- f. Click the **mouse button** (or press the **Space Bar**) to see the entrance effect for the title box. Return to the editor.
- g. We want the title to appear automatically.
 Click 'Animations / Advanced Animation / Start' and select With Previous.
- Image: Animation Pane
 Image: Start
 On Click

 Add
 Image: Trigger v
 Image: Start
 On Click

 Add
 Image: Animation Painter
 Image: Start
 On Click

 Animation v
 Animation Painter
 Image: Start
 On Click

 Advanced Animation
 Image: Start
 Image: Start
 Image: Start

 Advanced Animation
 After Previous
 After Previous
- View the presentation again and check that the title animation takes place without prompting.
- i. Select the box containing your facts and select an entrance effect from the *Animation Gallery*. You may also select one of the extra options from the *Effect Options* list.
- j. View your presentation and either click the **mouse button** or press the **Space Bar** to introduce each fact in turn.
- **k.** Back in the editor, select the picture and choose an entrance effect for this.

Notice that the animations have been numbered in the order that they occur. The title, which is introduced automatically, is given a zero. The other animations are numbered 1, 2, 3 etc.

I. Check your presentation and save the file.





Task 1 – Printing handouts

Presenters often offer handouts to their audience for people to take home or for people who can't read the slides properly. To save on printing, these sheets usually have several slides on each page. To save paper, we will print to a PDF file.

- a. Open your 'PB Basics' presentation. Click the File tab and select Print.
- b. From the *Printer* options, select **Microsoft Print to PDF** (or the equivalent on your system).
- c. Make sure that **Print All Slides** is selected in the Settings options.
- d. Select **4 Slides Horizontal** from the *Slides* options. Click again on this menu and tick *Scale to fit paper*.
- e. Select Landscape Orientation and click Print to create your PDF file.

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🕜 Home	Copies: 1 🗘	
🖹 New	Print	TIGERS
🗁 Open		♦ Tigers are from the
Info	Microsoft Print to PDF Ready	ANIMALS
Save a Copy	Printer Properties	Some brief facts
Print	Settings Print All Slides Rist artice presentation	1
Share	Slides:	
Export	4 Slides Horizontal Handouts (4 slides per page)	POLAR BEARS
Close	Collated 1,2,3 1,2,3 1,2,3	Rabbits are herbivores Rabbits live from std: 20 years; Article are herbivores Articl
	Landscape Orientation	Rabbits are ground dwellers.
	Colour ~	3 4 1
	Edit Header and Footer	

Task 2 – PowerPoint show

You have the option of saving the file as a *PowerPoint Show*. Open the **File** tab and select **Save a Copy**. Type your file name and select '**PowerPoint Show** (*.ppsx)' from the drop-down list. Close the PowerPoint application and open the file you have just created. How is it different to the files we have worked with before?

PB – Basics	
PowerPoint Show (*.ppsx)	N
Deverage int Descentation (* matu)	12

Extension – A professional presentation

This tutorial has concentrated on learning a variety of skills rather than producing a polished presentation. Use your expertise to produce a professional looking PowerPoint about a subject of your choice. The slides should have a consistent feel, using the same headings, colours, styles, animations and transitions throughout.