

SECTION

1

MULTIMEDIA TOOLS
AND APPLICATIONS



ICTs IN THE SOCIETY

Organising, Managing and Presenting Information Using Essential Productivity Tools

INTRODUCTION

In our modern world, computers are everywhere, even in places you might not expect! Some are more obvious, such as laptops and desktop computers. Others are obviously electronic, but you might not have thought of them as ‘computers,’ like smart phones, TVs, and video game consoles. Some are completely hidden from view to the point where you might not even know they’re there at all!

In today’s technological world, computers are integral to our daily lives, popping up in surprising places beyond the usual laptops and desktops— like the smartphones, game consoles, combine harvesters and even in cars! From guiding you with GPS to controlling airbags and playing music. Computers are almost everywhere but not all computers are built for the same tasks; you certainly cannot write an essay with the computer the DJ uses for mixing music.

In this section you will explore what computers are, focusing on their hardware and software components. You will also learn about word processing applications, which are necessary for creating documents like the book you are reading now. Again, you will study about how to use these document creation tools effectively to produce, edit, and format text, helping you create professional-looking documents. Understanding these basics is key to navigating the digital world efficiently, enhancing both your academic and personal life.

Stay curious, ask questions and gain the experience.

At the end of this section, you should be able to:

- Describe software, hardware, and other computing features needed to create a document.
- Create, Edit and Format text and paragraphs (Cut, Copy, Bold, Italic, Tables, Find and Replace, Format Painter, Spelling & Grammar check, Styles) using desktop/online computing tools (word processing software e.g., MS Word, Google Docs) keyboard, mouse etc.
- Save and print documents (Save, Save As, Print)
- Format the overall appearance of a page through colours, watermarks, headers and footers, page layout, paragraph and line, change capitalisation, bordering and shading,

perform bullets and numbering, do page column, tables, graphics) using desktop/online computing tools (word processing software e.g., MS Word, Google Docs) keyboard, mouse etc.

- Create multimedia documents using appropriate computing tools.

Key Ideas

- **Computer Hardware:** This is the physical part of a computer that you can see and touch, like the keyboard, screen, and mouse. Hardware needs software to work.
- **Software:** These are the programs and instructions that tell the computer hardware what to do.
- **Types of Software:** Software is divided into two main types: system software and application software.
- **Using Word Processing Applications:** These applications let you create, edit, and change the look of text and paragraphs using various tools.
- **Formatting Tools:** Tools like bold, italic, underlining, adding tables, and checking spelling are used to enhance and organise text in a document.
- **Document Layout:** Adjusting the layout involves setting up the overall look of the page, including borders, shading, and breaks to make the document organised.
- **Pagination and Layout:** Settings for headers, footers, paragraph alignment, and spacing help organise where text appears on the page.
- A **list** is a series of items presented in a structured way using bullets or numbers.
- **Bulleted lists, numbered, and multilevel lists** are different types of listing used in MS Word.
- **Presentation software** is a computer program that is used to present information, normally in the form of a slideshow.
- There are three main functions of a presentation software, which are: **an editor** that allows text to be inserted and formatted, **a method for inserting and manipulating multimedia** (graphic images, video and sound) and **a slideshow system** to display the content, usually with the facility to add animations and transitions.
- Some examples of presentation software are **Microsoft PowerPoint** (part of the Office suite) and **Apple Keynote**.

What is a computer?

A **computer** is an electronic device that can be programmed to automatically carry out sequence of instructions such as arithmetic or logical operations. It can store, retrieve and manipulate data based on instructions given to it called **programs**.

The most general definition of ‘computer’ is simply: ‘something that computes,’ i.e. something that performs mathematical calculations. That’s very broad! By this definition, doing maths homework makes *you* a computer. In fact, the word ‘computer’

was derived from the Latin term ‘computare’ and back in the 1700s a ‘computer’ was used to refer to a person who did calculations.

A more instructive, but still general, definition of ‘computer’ is ‘something which *processes* inputs to produce outputs. When you do maths homework, you take in the questions as input and produce answers to the questions as output, The ‘processing’ is *how* you work out the answers, e.g. you use techniques you’ve learned and write down intermediate results on paper. We can write some more examples in a table like this:

Example of computer	Input	Processing	Output
You, doing maths homework	Maths questions	Using previous knowledge and techniques you’ve learned. Writing intermediate results on paper.	Answers to the maths questions (hopefully the correct answers but not necessarily!)
Your brain (a biological computer)	Your senses (vision, hearing, smell etc.)	Complex biological processes involving billions of interconnected neurons sending electrical signals to each other.	Electrical signals sent to your muscles telling them how to move (among many other things)
Airbag controller	Sensors which measure the strength of impacts on the car	A ‘microcontroller’ (i.e. a small, specialised computer) which reads the data coming from the sensors and decides whether an impact is strong enough to need the airbags	A signal to the airbags telling them whether to inflate or not

Table 1.1

Activity 1.1

Think of what computers are used for in your everyday life. Write as many examples as you can! Then, share your findings with colleagues.

WHAT IS ICT?

We've looked at a lot of different kinds of computer, but ICT only deals with a particular subgroup of computers. Which subgroup? The clue is in the name ICT: Information Communication Technology.

Information

We are focused on computers which input, process, and output information. Information can be approximately defined as 'meaningful facts and figures'. For example, 'Mary is 150cm tall' is information. A class register also contains information, it tells us who is in the class and their attendance. Photographs contain a lot of information about what the world looked like at the exact moment a photograph was taken.

At this point, we can filter out airbag controllers: it inputs information (the strength of an impact) and processes that information (is the impact strong enough to need the airbags?), but the output is an action (the airbags inflating), not information. These kinds of computers which control mechanical parts are focused on by mechanical engineering, not ICT.

NOTE: 'Information' and 'data' are often used interchangeably. There are different ways to distinguish them, depending on your definitions, but 'data' is usually a narrower concept than 'information'. It refers to the raw 'facts and figures' stored on a computer. For example, a printed-out photo contains 'information' but not 'data.' However, that same photo *would* be 'data' if it was stored on a computer. Communication

We primarily care about the *communication* of information.

- **Computer-to-Computer communication:** How do different computers send information to each other? For example, phones send and receive sound to each other across large distances.
- **Human-to-Computer communication:** How can you interact with a computer and send it information? For example, by typing on a keyboard you can send text to a computer.
- **Human-to-Computer-to-Human communication:** How can you use computers to communicate with other people? For example, you write an essay on a computer (Human-to-Computer) and then your teacher reads it (Computer-Human). You are communicating your ideas to your teacher *through* the computer.

This focus on communication means we care more about 'the big picture' than the small details.

Technology

We are focused on ‘technology,’ i.e. human-made devices. When you do your maths homework you input, process, and output information. You also communicating that information when you give your answers to your teacher. But you are not technology, so you and your brain are not the kind of computer we study in ICT!

Activity 1.2

In your groups, review the uses for computers the class came up with in Activity 1.1. Discuss which examples you think might be studied in ICT and why. Share your responses with the class.

GENERAL PURPOSE COMPUTERS

We’ve seen that there are many kinds of computers, but most of the time when people talk about a ‘computer,’ what they really mean is a ‘desktop (personal) computer’, a.k.a. a PC, which looks like this:



Figure 1.1: A desktop computer

We will also focus on desktop computers for the time being. Why? Because desktop computers are the most instructive example of a whole group of computers: general purpose computers.

A general purpose computer can perform many different tasks, e.g. on the same computer you can:

- Write essays
- Surf the internet
- Watch videos
- Design posters
- Play games
- Bookkeeping

This is the opposite of a special purpose computer, which is designed to exclusively perform a specific task, e.g. an airbag computer only monitors impacts and inflates airbags.

The reason these general purpose computers can perform so many different tasks is because they are *programmable*. If you give one of these computers a *program* (i.e. a set of instructions), it will perform the task described by the program. More on that later.

Examples of general-purpose computers include desktop computers, laptops, and smartphones. These devices might *look* very different, but they are all made of similar parts (the main difference is the size!), and they can all perform similar tasks.

A computer can accept data (input), process the data, and then output the results.

What makes up a (general purpose) computer system?

Computer systems are made from *hardware* and *software*.

Computer Hardware Basics

Did you know?

The first point of physical contact you can have with any computer system is hardware.

Think of what you can see, hold, touch on a computer system. Computer hardware can range from smaller size to a huge size. Some of them function by connecting them to other components through a cord. In recent times, there are cordless ones that use wireless connectivity. [pop up]

Computer hardware is any physical device or component used in or with a computer system.

Classifications of computer hardware

Hardware can be classified as external or internal.

External hardware devices (peripherals)

External hardware devices are devices located outside the computer. Some of these external devices are called peripherals. A peripheral device is an auxiliary device that a computer uses to transfer information externally—for example: speakers, a computer mouse, and headphones.

Peripherals are connected to the computer system with cables using a special connection socket called a port (for example, a USB port) or using a wireless connection (Wi-Fi or Bluetooth).

External hardware devices fall under; input devices, output devices, processing devices, storage devices, and communication devices. These external devices are used in the creation of documents.

Input device

An input device is a hardware device which is used to enter data into a computer for processing. Examples are: Keyboard, Mouse, joystick, microphone, scanner, camera, touch screen, web cam and track ball.

‘Input’ is the actual data that is sent into the computer system for processing.

Some examples of input include:

- Words written using a keyboard
- Screen clicks using a mouse
- Live video from a webcam
- Sound from someone using a microphone for voice control
- Movement in front of a motion sensor in an automatic door

Someone using a computer to create a poster in Word would use a keyboard and mouse to enter and manipulate text. A scanner could be used to enter and input a photograph for use in a poster.



Figure 1.2: Examples of input devices

Output device

An output device is a hardware device that receives information from a computer and presents it in a human understandable form. Examples include: monitor, printer, scanner, speaker, touchscreen, projector, and headphones.

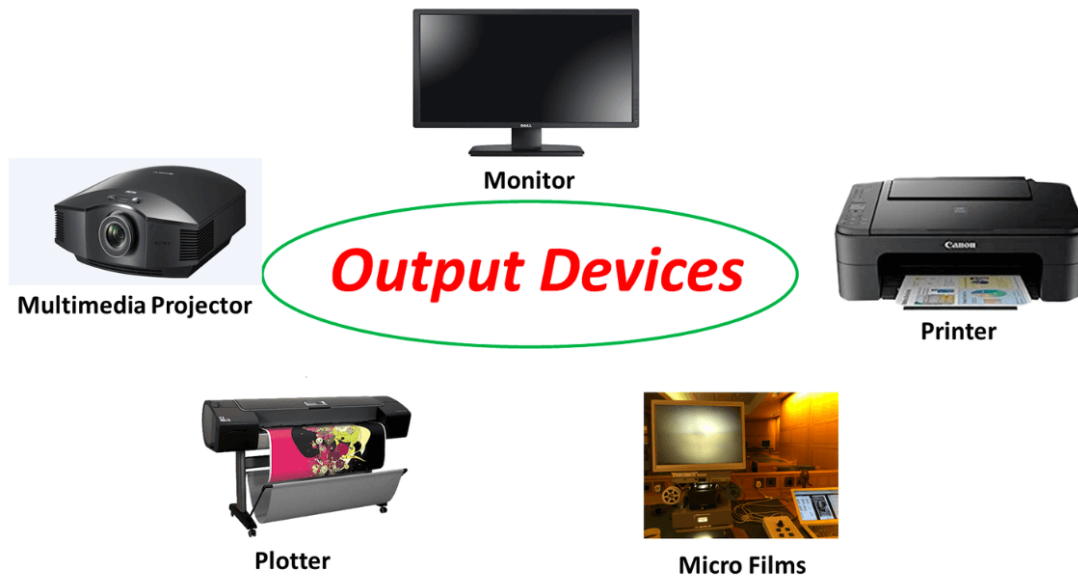


Figure 1.3: Examples of output devices

A monitor is used to display text and images

A printer would be used to get a hard copy of text and images.

A touchscreen is classified as both an input and output device because it can be touched to 'click'/tap parts of the screen (like a mouse) and display results as well (like a monitor).

The data that has been processed and sent out of the computer is called output.

Examples of output include:

- Sound coming from a mobile phone speaker
- Text appearing on a laptop screen or computer monitor
- Pictures printed from a printer
- Video shown on a tablet screen

Storage Device and Storage Media

In data storage, two pieces of equipment are normally involved. These are storage devices and storage media. The storage device writes or records onto the storage media while the storage media hold the data for future use.

Storage Medium (Media): This refers to the material or substance on which data is actually stored. It is the physical medium that holds the data in a form that can be read or written. The medium can vary based on the technology, such as magnetic, optical, or solid-state.

Storage Device: This is the hardware component or mechanism that reads from or writes data to a storage medium. It acts as an interface between the storage medium and the computer, enabling data to be accessed or stored on the medium.

Examples

Storage Medium (Media):

- Magnetic tape (used in tape drives)
- Optical discs (such as CDs, DVDs, or Blu-ray discs)
- Flash memory (used in USB drives or SSDs)
- Hard disk platters (inside a hard drive)

Storage Device:

- Tape drive (reads/writes data on magnetic tapes)
- Optical drive (reads/writes data on CDs, DVDs, or Blu-ray discs)
- USB flash drive (contains both the flash memory and device in one unit)
- Hard disk drive (HDD) (reads/writes data on the magnetic platters)

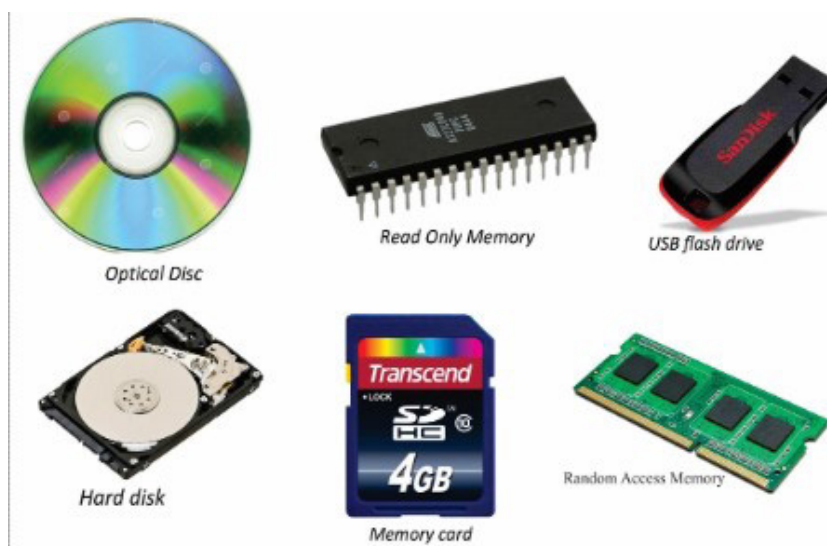


Figure 1.4: Examples of secondary storage devices and media

There are many types of secondary storage, and each one has its own special features. Because all devices are different, some work better for certain tasks than others. For example, a hard disk drive has a lot of space and good speed, making it great for storing programs and data you use every day. A USB pen drive (also called a USB Flash drive or memory stick) has less space but is small and easy to carry, making it perfect for moving files between computers.

Some secondary storage devices can be inside your computer (internal) or outside (external). The internal hard drive in your school's computer can store things like a poster you made in class, and an external hard drive or USB pen drive can help you take that poster home.

Cloud storage is now very popular for storing computer files. It means saving data on remote servers (computers that store lots of files) in data centres, which you access through the internet. Cloud storage is flexible and scalable, meaning you can get more space if you need it, and you can access your files from anywhere with an internet

connection. So, if you saved your poster file in the cloud at school, you could easily open it at home without having to move the file physically. Devices like a modem and router can help you set up internet access at home.

Internal hardware devices or components: They are any hardware that is located inside the computer. Examples include: CPU: (Central Processing Unit), internal hard disk drive, ROM (Read Only Memory), and RAM (Random Access Memory).

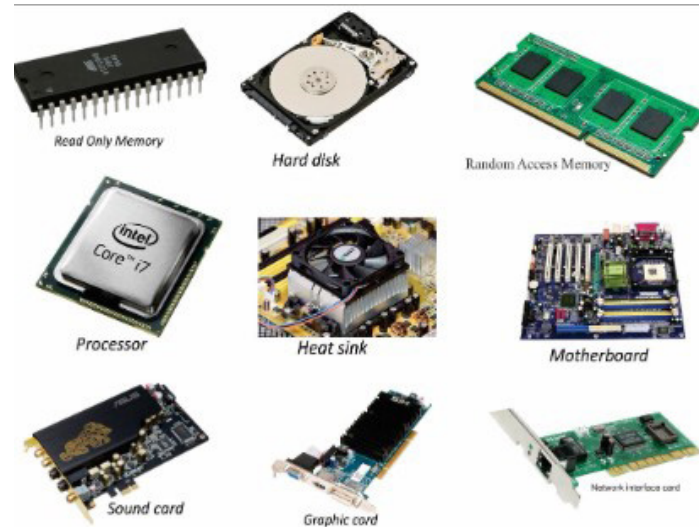


Figure 1.5: Examples of internal hardware

A brief description of the functions of some of the main internal hardware items

Motherboard is a large circuit board that holds and connects all the essential components of a computer, allowing them to work together, as well as adding other basic Input/Output ports for connecting peripherals (e.g. USB ports).

CPU (Central Processing Unit or processor) is the ‘brain’ of the computer where all the processing such as executing program instructions is done.

RAM (Random Access Memory) is the internal working memory of a computer where the programs and data that it’s currently using are stored.

NIC (Network Interface Card) is the hardware that enables a computer to connect to a network. A computer network is two or more computers connected via wires or wirelessly. NICs exist to support various networking technologies such as Ethernet, Wi-Fi, Bluetooth, and cellular connectivity. Most motherboards come with an Ethernet port built-in, but wireless connectivity usually requires a dedicated NIC.

A sound card is hardware that is responsible for handling sound received via a microphone and for producing sound on a computer that can be heard through speakers. Motherboards almost always have built-in sound processing, but dedicated sound cards can be added to provide better sound quality if needed.

GPU (Graphics Processing Unit) is the hardware which is responsible for displaying images, videos, and animations on a computer screen/monitor. Many CPUs have

integrated GPUs which output through the motherboard. Dedicated GPUs (a.k.a. graphics cards/video cards) are used when the CPU doesn't have an integrated GPU or if better performance is needed, e.g. for graphically demanding video games.

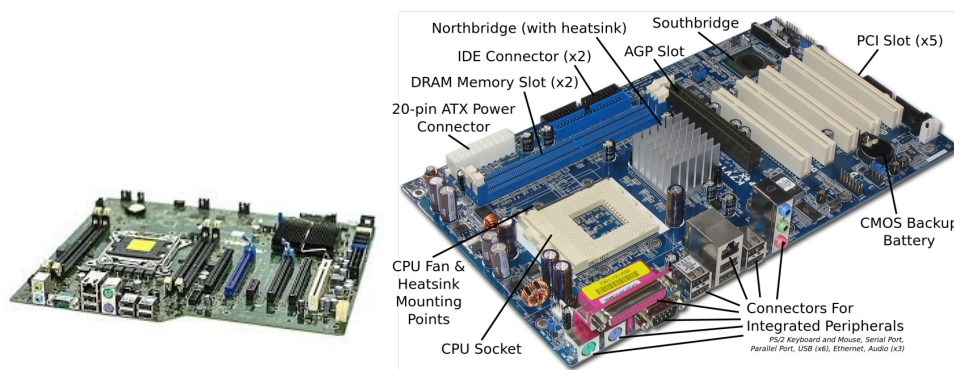


Figure 1.6: Motherboards – empty and with components

All these items would be considered processing hardware. That is, they are responsible for the processing of data within the computer system.

A multimedia document is a document with two or more types of media, including text, images, video, animation, or sound. If you are creating a multimedia document such as a poster or a slideshow, then:

- the CPU would run the required program (such as Word or PowerPoint).
- RAM would store the Word or PowerPoint program as it is running and your work.
- a NIC would enable you to save your work on network storage.
- a sound card would enable you to hear audio output from your slideshow.
- a graphics card would enable video and graphics on your screen/monitor.

Putting it all together

As explained above, the motherboard connects the various types of hardware to make a computer system. The block diagram in Figure 1.7 shows how data flows between the main hardware components.

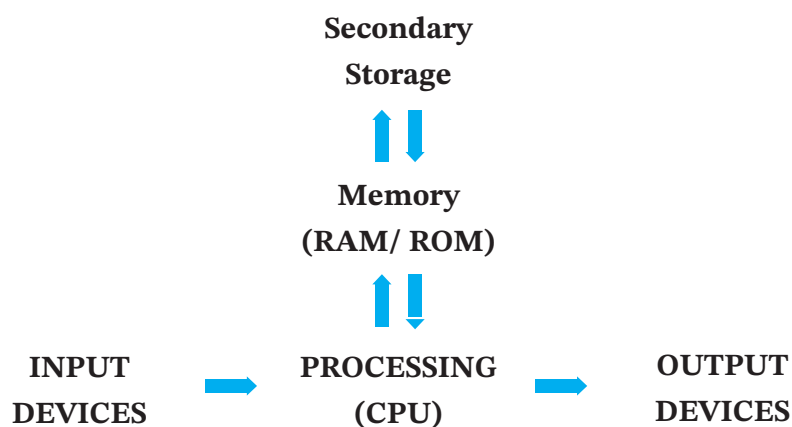


Figure 1.7: Block diagram of a computer system

Activity 1.3

In your group, match the images of hardware on the left to the descriptions on the right of Table 1.2.

	<p>This device is for inputting text into a computer and controlling it with commands.</p>
	<p>This device is a convenient way to transfer files between computers.</p>
	<p>This device outputs visual data which you can see directly using your eyes.</p>
	<p>This device connects all the computer's hardware together.</p>
	<p>This device is the brain of the computer.</p>
	<p>This device generates and outputs visual data, but not in a way you can see directly.</p>

Table 1.2

COMPUTER SOFTWARE BASICS

Computers do only what they are instructed to do. Computer programs or software provides these instructions.

Software is a set of instructions that tell a computer what to do or how to perform a specific task. Like hardware, there are categories of software, with the most important two being system software and application software.

System Software

These are computer programs designed to run a computer's hardware and application software and make the computer system available for use. System software can be further broken down into three main categories – **Operating systems, device drivers, utility software.**

Operating system: system software that manages your application software and how your hardware devices work together. It lies between the applications software and the computer hardware. Examples are operating systems are:

- Desktop/laptop OS examples: Windows, macOS, and Linux
- Smartphone OS examples: Android and iOS

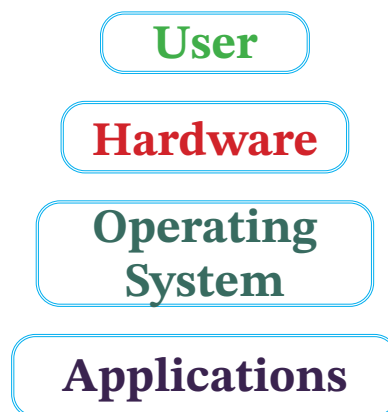


Figure 1.8: The OS links the application/user to the hardware

Figure 1.8 shows the relationship between the user, application software, operating systems, and the hardware.

The main functions of an Operating System

1. Booting the computer.
2. Managing the computer's resources (CPU, Memory, storage devices and printers)
3. Managing files.
4. Handling input and output operations.
5. Executing and providing services for application software
6. Providing a user interface (i.e. a way for the user to interact with the computer).



Figure 1.9: The logos of some popular operating systems

Device Drivers: A device driver is a program designed to control a particular hardware device that is attached to a computer. The main purpose of the device driver is to serve as a translator between the hardware device and the operating system or application software that uses it. It helps the computer to communicate with the device by translating the operating system's instructions into a language that a device understands to perform its task.

Examples: Printer driver, display driver, USB driver, sound card driver, motherboard driver and scanner driver. Many of these drivers come with the OS, especially for common devices like USB keyboards.

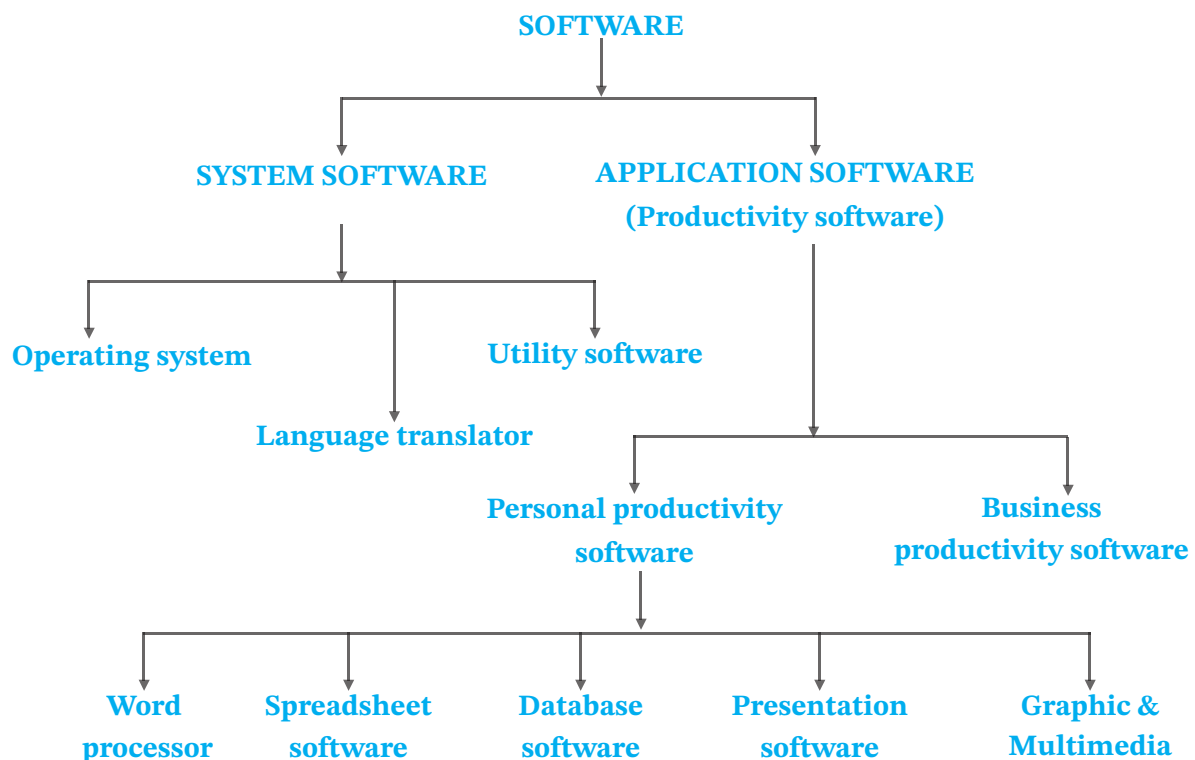
Utility Software: Is a program that helps setup, analyse, configure, improve, and maintain a computer system. Utility software provides additional functionality to your operating system. They are used to support, enhance, or expand existing programs in the computer system. Examples of utility programs include:

- Disk cleanup tools (for utilising the computer's storage more efficiently)
- Data backup programs (for creating copies of files, to protect against loss or damage)

Antivirus programs (for protecting your computer from viruses, i.e. malicious software)

Application software (Productivity software or End User Programs): These are programs designed to perform a specific task other than one relating to the operation of the computer/device itself. Often, the task is to meet the specific needs of a user. Different users will have different needs, and therefore use different applications, even if they all have the same hardware and operating system. One user may be interested in entertainment, so they run game applications. Another might be interested in personal productivity software. Personal productivity software helps you to do things that you'd otherwise have to do manually. Personal productivity software includes such tools as word processors, spreadsheets software, presentation software, and graphic design software.

Application software is software designed to help a user solve specific problems (personal or business) or perform specific tasks (again, personal or business). *[note for designers put a textbox around this definition]*



Activity 1.4

Individually, write down how you would define ‘computer,’ ‘hardware,’ and ‘software.’ Share your definitions with your group and collectively agree on one definition for each of the concepts. Then, share your definitions with the class.

Activity 1.5

In this activity we have a jumbled list of hardware and software components in the box at the left-hand side of Figure 1.10. Also, on the right-hand side are two circles, one labelled, **HARDWARE** and the other **SOFTWARE**. In your group, identify whether a component listed inside the box at left-hand side is a hardware or software component of a computer, and map it to the appropriate circle where it belongs by drawing a line with an arrow.

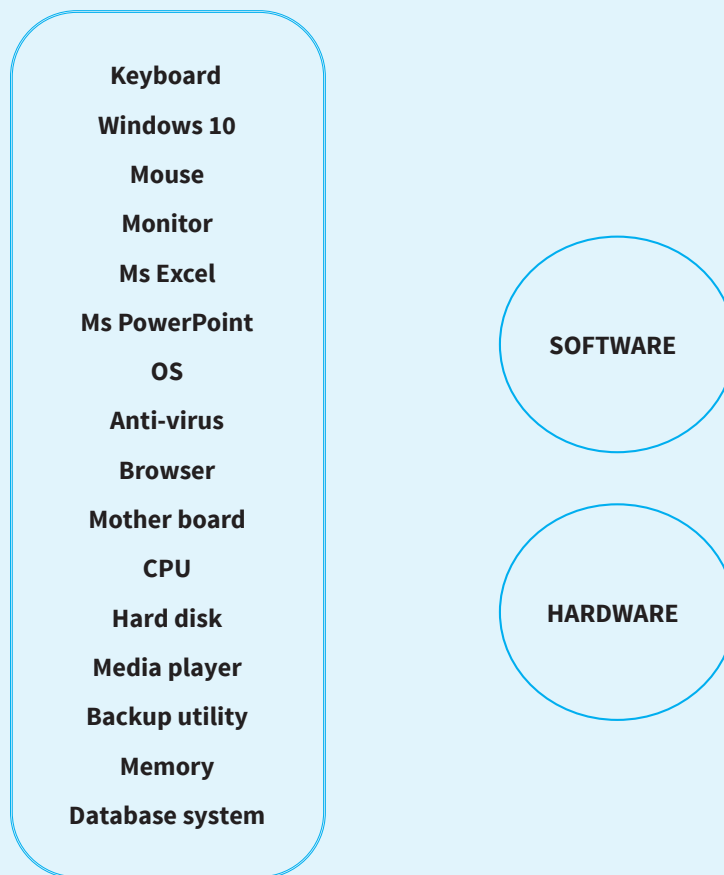


Figure 1.10

Activity 1.6

In your group, explain the difference between hardware and software. Can you think of any good analogies?

Activity 1.7

For the previously identified uses of computers you narrowed down as a class for Activity 1.2, pick at least one and discuss in your groups what software and hardware is needed for them. Make sure you think of at least one thing for each of the following: application software, input device, output device, and secondary storage device. Feed back to the class about at least one of the uses.

Activity 1.8

Play hangman in your groups, taking turns to select a hardware or software related word for the others to guess.

Extended Reading

- Page, A., Karl, H., Levine, D., & Lincoln, H. (2020). Computing. OUP: Oxford Hardware and Software (Chapter 2, page 60)
- [Title With Picture Layout \(tiu.edu.iq\)](http://tiu.edu.iq) Basic computer hardware of software
- [Computer Science Basics: Hardware and Software \(youtube.com\)](https://www.youtube.com)

WHAT IS WORD PROCESSING?

Word processing is the use of a program called a word processor, running on a computer, that allows users to create, edit, format, and store primarily text-based documents.

Microsoft (MS) Word is the most used word processor, but other word processors exist such as Pages and Google Docs. All the instructions and screenshots in this manual are for MS Word. Your word processor might look different to the screenshots, and that's OK! You might have a different version of MS Word, or be using a different word processor, or even be using a smartphone instead of a desktop computer. Most word processors will have similar features and follow similar steps, but you might have to spend a bit more time trying to find them. Thankfully, try finding and using the 'Help' option in your word processor if you get stuck!

PARTS OF THE MICROSOFT WORD WINDOW

Being familiar with the names and various parts of Word window and their function(s) is very useful and will be necessary for you to know when following the instructions in this manual.

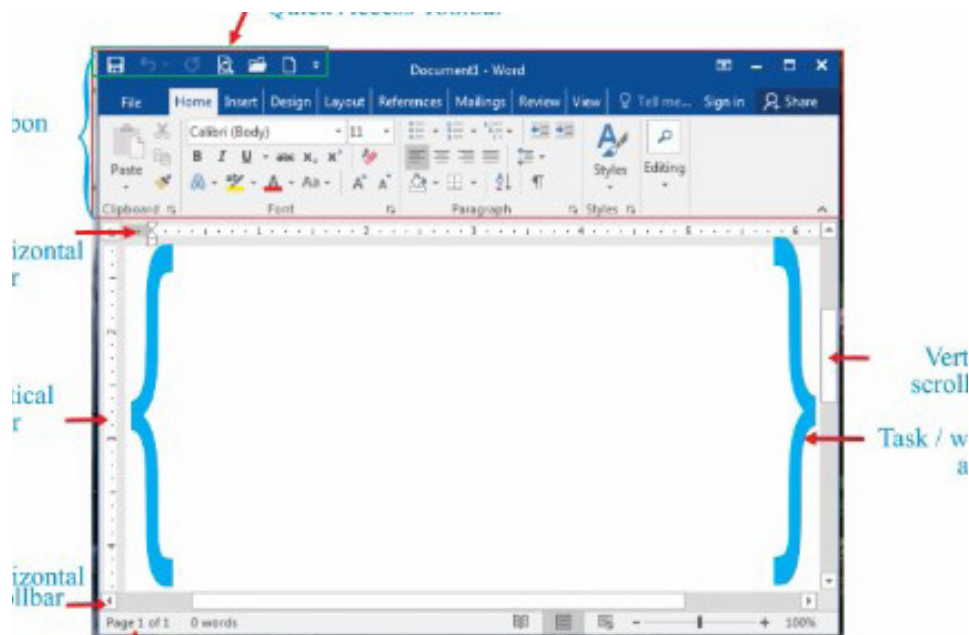


Figure 1.11

The Ribbon

The **ribbon** is a command bar at the top of the window in Office programs such as Word. Ribbons are designed to help the user to quickly find the commands they need to complete a task. The ribbon organises a program's features into a series of tabs at the top of the screen and these tabs are composed of groups of commands with a common purpose.

The **Home tab** is considered as the default tab since the tools of the home tab are displayed on the ribbon upon launching the word application. The home tab has five main groups or views which includes, Clipboard, Font, Paragraph, Styles and Editing. Each of the views have different tools which are used in document creation. The image below shows the home tab.

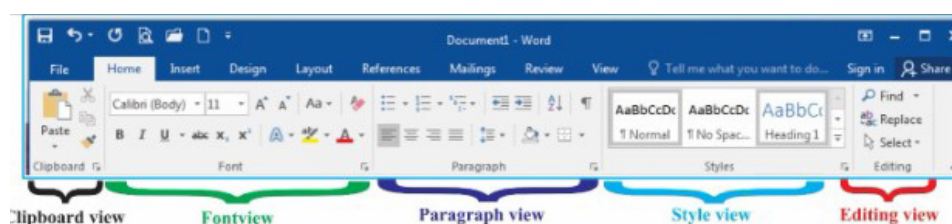


Figure 1.12

The second group in this ribbon under the Home tab is **Font** as shown in Figure 1.12.

NOTE: the 'Office button' or 'Application button' in the top left of the window is often replaced with a tab called 'File' in many versions of MS Word. In the following guidance we will refer to it as 'File' for the sake of brevity.

Now that you are familiar with the parts of the Word window, let us look at how to create and save a new document. Follow the following steps: [pop up]

How to create and save a new document

Steps:

1. Start Microsoft Word.
2. Click Blank document. (A new blank document appears)
3. Click the *File* tab
4. Click on the *Save As* command (or *Save a Copy* if using Word 365). Sometimes, you are required to choose a location such as Desktop or browse for any other locations.
5. Make the necessary changes in the *Save As* dialogue box (you may need to pick a new file name: choose one which is appropriate for the document or use the auto-filled name if you're just practicing).
6. Click *Save*.
7. Type in your text. The text you type will be inserted into the document.
8. Click on *Save*, or use the keyboard shortcut **Ctrl + S**, regularly to update the current content of the last stored file.

9. Click on the X in the top right-hand corner of the Word window or select *File > Close* (i.e. click the *File* tab, then select the *Close* option). You may be prompted to save again at this point.

Use *File > New* when starting a new blank document from within Word. Use *Save As* when saving a document for the first time. It is good practice to save the blank document using an appropriate file name and folder before you start entering text.

Activity 1.9

Instructions:

In this activity, you are going to create your first new blank document, type in some information, save it and finally exit the word application. Follow the steps below to practice.

Steps:

Step 1

Launch or start Microsoft office Word application

Step 2

Click Blank document. (A new blank document appears)

Step 3

Click the *File* tab

Step 4

Click on *Save As* command (or *Save a Copy* if using Word 365)

Step 5

Type the word **file1** in the *Save As* dialogue box

Step 6

Click *Save*

Step 7

Type in some text. This could be text your teacher tells you to enter, or you could come up with on your own. If you're not sure what to write, why not try listing some of your favourite things and why you like them?

Step 8

Remember to save your work as you go!

Step 9

Click on the X in the top right-hand corner of the Word window or select *File > Close*. You may be prompted to save again at this point.

Take note of this additional information while typing;


Text entry conventions

- ***Press Enter to indicate the end of a paragraph, not the end of a line.***
- ***Many word processor users choose not to indent paragraphs and insert an extra line instead. In this case press Enter twice to move on to a new paragraph.***
- ***Traditionally the rule was two spaces after a full stop and one after a comma. Nowadays, it is more common for word processor users to have just one space after both a comma and a full stop.***

The above activity may be repeated several times using different text. This will build up a set of files for you to use for the editing tasks that follow.

HOW TO OPEN AN EXISTING DOCUMENT FOR EDITING

Steps:

1. Click on the File Explorer icon. []
2. Go to the folder location where your file is stored.
3. Open the document you wish to edit by double-clicking on it.

From within Word, the steps would be:

1. Click the *File* tab.
2. Click *Open*. The Open screen appears, select/browse a location, and select the file you want to open.

How to Print a Document

Steps:

1. Select *File > Print*.



Figure 1.13

2. To preview each page, select the forward and backward arrows at the bottom of the page.

If the text is too small to read, enlarge using the zoom slider at the bottom of the page.

3. Choose the number of copies, and other options you want.

Check that the correct printer is selected and online.

Printer properties will give you additional options including colour.

Select the *Print* button.

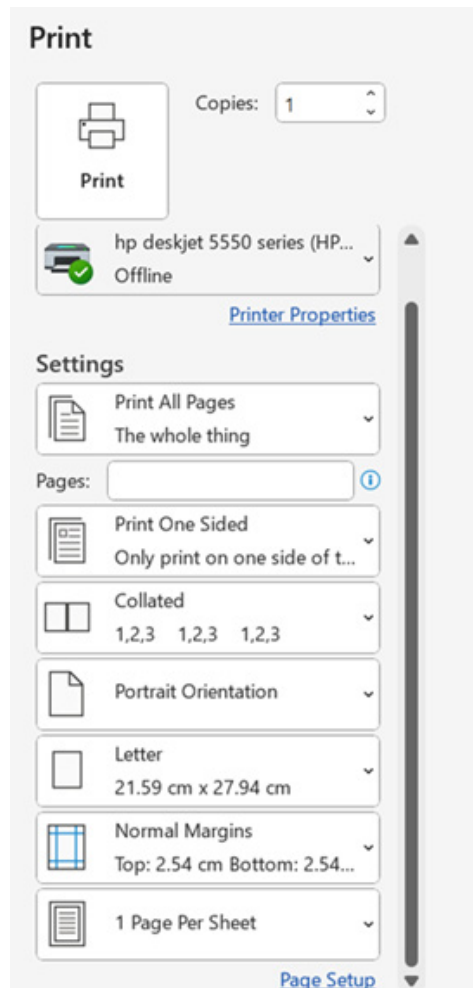


Figure 1.14

NOTE: Is a printer connected to your computer? If there isn't, you won't be able to print your document!

Activity 1.10

In this activity, you will open a file you saved earlier, add some information to it, save the update, and print out your document.

Follow the steps below:

Steps:

Step 1

Click on the File Explorer icon.

Step 2

Go to the folder location where your file is stored. Let's say you called it **file1**.

Step 3

Double-click on **file1** to open it.

OR

From within Word, the steps would be:

1. Click the *File* tab.
2. Click *Open*. The Open screen appears, select/browse a location, and select the file you want to open (**file1** in this case)

Step 4

Add your name and class to the end of the document.

Step 5

Ctrl + Save your updated document.

Step 6

Print out your document in black and white on a single side of A4 paper.

Basic Document Editing Guidance**Scenario**

Rachael Opoku, a newly employed secretary of a company created her first memo for distribution to various offices within the company. After typing, she printed a draft-copy and showed it to her boss for verification. To her dismay, her boss was displeased since the document contains several spelling and grammatical errors. Also, some of the lines of text were in the wrong place within the document, making it difficult to understand its content.

What should the secretary do to the document to move the text to the right places, fix the spelling mistakes, and make it understandable? Don't worry, by the end of this section, you will discover what Rachael needs to do, the tools needed, and how to use them!

Editing Documents

Editing is the act of making changes to the content or text of an existing word document.

Word offers many features or tools that help you edit text in a document. Some of these tools include **Cut**, **Copy and Paste**, **Find and Replace**, **Delete**, **Undo and Redo**. They can usually be found on the *Home* tab or some other quickly accessible place, depending on what version of MS Word you're using. See if you can find them!

NOTE: Often, before you edit text, you may have to select it. Selecting text involves clicking and dragging the cursor over the text to highlight it.

What do you know about these? [pop up]

Copy and Paste: duplicating the selected item. The selected item can be found in both original and the new, pasted locations. The keyboard shortcut for copy is **Ctrl + C**, and the shortcut for paste is **Ctrl + V**.

Cut and Paste: the same as copy and paste, except the highlighted text is deleted and only the new copy is kept. You can use this to quickly move text from one location to another. The keyboard shortcut for cut is **Ctrl + X**.

Find and Replace: is a function in Word which allows you to search for targeted text, characters and replace it with something else. The keyboard shortcut for find by itself is **Ctrl + F**, and the shortcut for replace is **Ctrl + H**.

D. How to Undo the Last Operation

1. Click the **Undo** button on the **Quick Access Toolbar** or press the key combination **Ctrl + Z** on the keyboard.
2. To undo multiple operations at once, click on the arrow next to the undo button and choose the desired action(s) you want undo from the drop-down button.
3. To redo an action, click the **Redo** button on the quick access toolbar or press **Ctrl + Y** key combination on the keyboard. You can also redo multiple actions.



Figure 1.15

E. How to Select Text in a Word Document

1. **Select any amount of text:** click and drag the cursor over the text to highlight it. Alternatively, you can click where you want the start of your selection to be, then hold the **Shift** key as you click where you want the end of the selection to be. Notice that your cursor changes from an arrow to something which looks like a capital 'I' when you hover over text.

2. **Select a word:** double-click on the word.
3. **Select a paragraph:** triple-click the paragraph.
4. **Select a line:** move the I-beam to the left end of the line until it turns into a right-pointing arrow [↗] and then click. (This might not work in all word processors.)
5. **Select an entire document:** use the **Ctrl + A** keyboard shortcut to *Select All*.

F. How to Delete (or remove) text

We may delete an entire block of text in one go or character by character

Method 1 (Deleting an entire block of text in one go)

1. Select the text you want to delete.
2. Press the *Delete* key or the *Backspace* key (if none of the keys say ‘Backspace,’ look for the arrow pointing left).

Method 2 (Deleting text character by character)

Text can be deleted character by character, either from left to right or from right to left.

1. Deleting text from right to left:
 - a. Click to position the cursor or insertion point (a vertical blinking line) at the right end of the text to be deleted.
 - b. Press the **Backspace** key on the keyboard to delete a character per click.

NB: Press the Delete key if you are using Mac keyboard.


Deleting text from right to left using the backspace key 

Figure 1.16

2. Deleting text from left to right:
 - a. Click to position the cursor at the left end of the text to be deleted.
 - b. Press the delete Key to delete text a character per click.

NB: Press the **Fn** key in combination with the **Delete** key if you are using Mac keyboard.


 Deleting text from left to right using the **Delete** key

Figure 1.17

NOTE: Save your document to ensure the changes you are applied.

G. How to Copy or Cut and Paste

To Cut and paste Text:

- Select the text you want to cut
- Click on the **Cut** icon located on the **Home** tab in the **Clipboard** group as shown in Figure 1.18.

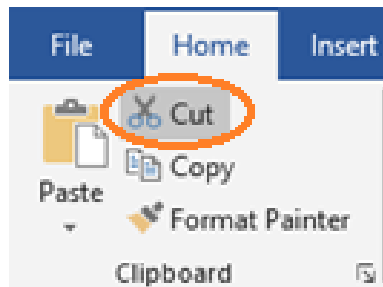


Figure 1.18

NOTE: You may use the **Ctrl + X** key combination to cut the selected text. On Mac keyboard, use **Cmd + X**

- Click in the area when you want to paste the cut text.
- Click on the paste icon in the clipboard or use **Ctrl + V**.

To Copy and paste Text:

- Select the text you want to copy
- Click on the **Copy** icon located on the **Home** tab in the **Clipboard** group as shown in Figure 1.19

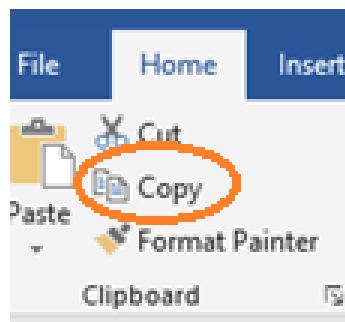


Figure 1.19

NOTE: You may use the **Ctrl + C** key combination to copy the selected text. On Mac keyboard, use **Cmd + C**

- Click in the area of the document where you want to paste your text
- Click on the **Paste** icon located on the **Home** tab in the **Clipboard** group as shown in Figure 1.20

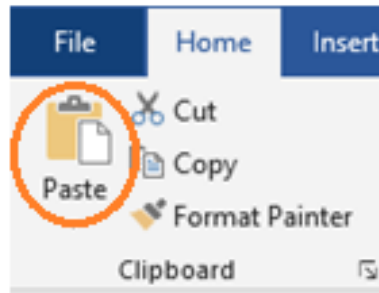


Figure 1.20

NOTE: You may use the **Ctrl + V** key combination to paste the selected text. On Mac keyboard, use **Cmd + V**

H. How to use the find and replace tool

When you are working with longer documents, it can be difficult and time consuming to locate a specific word or phrase. Word can automatically search your document using the **Find** feature, and it allows you to quickly change words or phrases using **Replace**.

Finding a word or text

1. Open the document you want to edit
2. Select the text to be replaced
3. From the **Home** tab, click the **Find** command. You can also press **Ctrl + F** on your keyboard. See Figure 1.21.

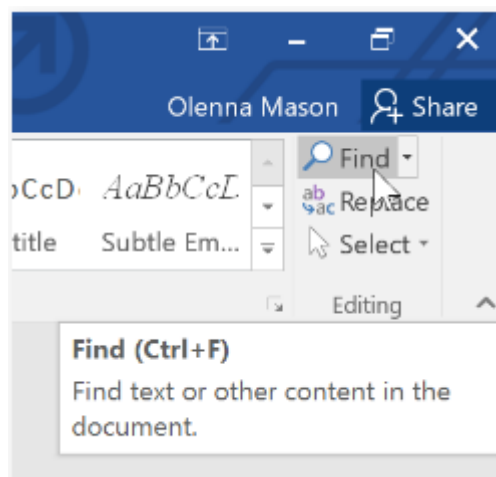


Figure 1.21

4. The **navigation pane** will appear on the left side of the screen. Type the text you want to find in the field at the top of the navigation pane. In this example, we are finding the word “fiction” as shown in Figure 1.22.

Replacing a word or text

1. From the **Home** tab, click the **Replace** command. You can also press **Ctrl + H** on your keyboard.

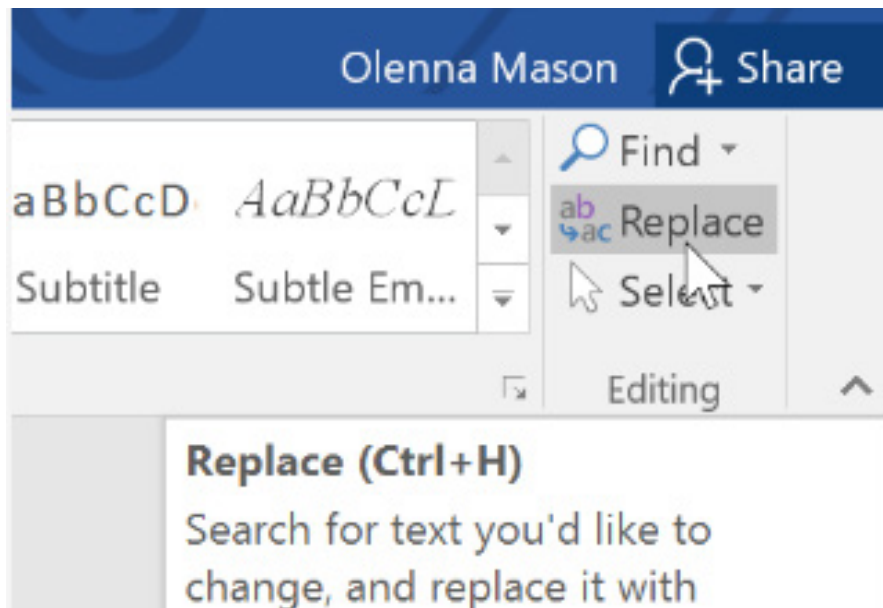


Figure 1.24

2. The **Find and Replace** dialog box will appear. Type the text you want to change in the **Find what:** field.
3. Type the text you want to replace it with in the **Replace with** field. See Figure 1.24.
4. Click the **Find next** button to locate and change the first instance of the word or text.

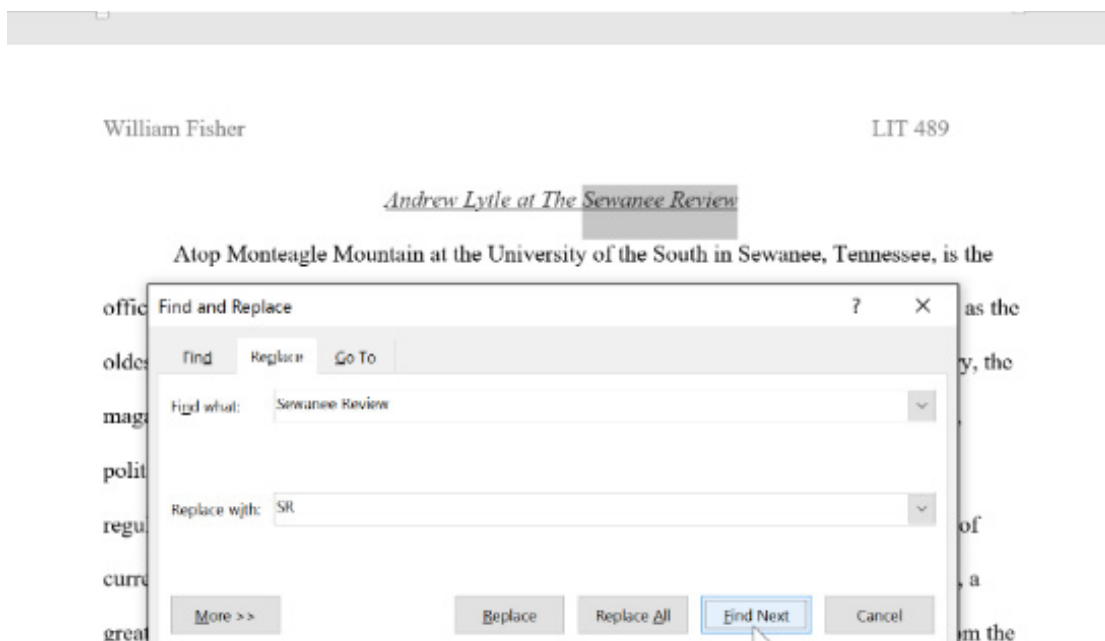


Figure 1.25

NOTE: You may click the **More>>** button for additional options.

5. Clicking the Find next button again will locate the next occurrence of the text.
6. Click on either **Replace** (to replace the currently highlighted occurrence) or **Replace All** (to replace all occurrences of the selected text or word with the new text or word)

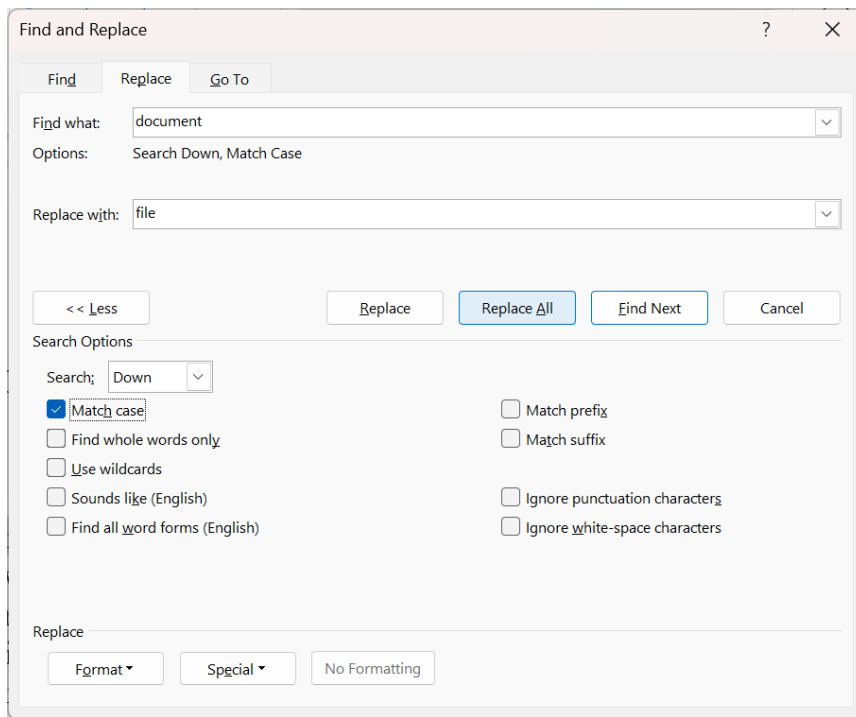


Figure 1.26

Activity 1.11

1. Open one of the files saved in Activity 1.10 or a file given by your teacher
2. Save regularly as you complete steps 3 to 9
3. Using Cut and Paste, swap the first and last paragraphs in the document
4. Copy and Paste at least two paragraphs so that you have some duplicate paragraphs.
5. Now delete these duplicated paragraphs.
6. Copy two sentences from each paragraph to the end of the document.
7. Undo the steps completed for step 6.
8. Use the Find/Replace tool to find all occurrences of a word in the document and replace them with another word with the same or a similar meaning
9. Repeat step 8 but this time only replace the second and third occurrences of the found word.

REVIEWING A DOCUMENT GUIDANCE

By default, MS Word will point out spelling and grammar mistakes and give you suggestions for how to fix them. You can check this by going to the *Review* tab and making sure Spelling and Grammar is enabled/shown. Now let's look at these features in more detail.

How to Correct Spelling Errors

Words underlined with red wavy line indicates a misspelt word. The red wavy line also indicates that the word typed is not found in the computer's dictionary.

Let us consider the following misspelled words in the sentence below (you can follow along by copying or typing these words into your own document):

- This is a **tset document**.

Method 1

Steps:

1. From the Review tab, click the **Spelling & Grammar** command.

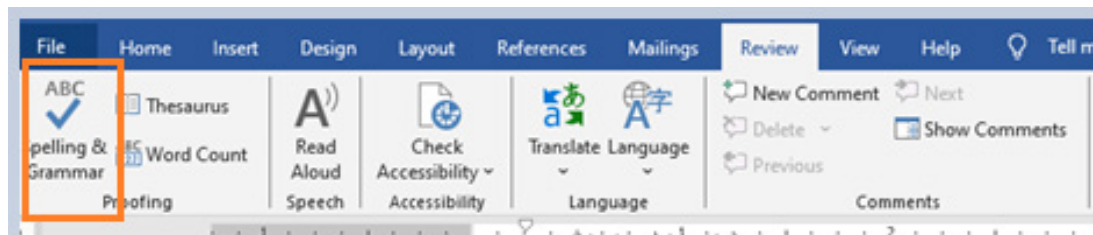


Figure 1.27

2. The **Spelling and Grammar** panel will appear at the right corner. For each error in your document, Word will try to offer one or more **suggestions**. Select a suggestion and click on *Change* to correct the error. You can also choose to ignore the spelling error prompt.

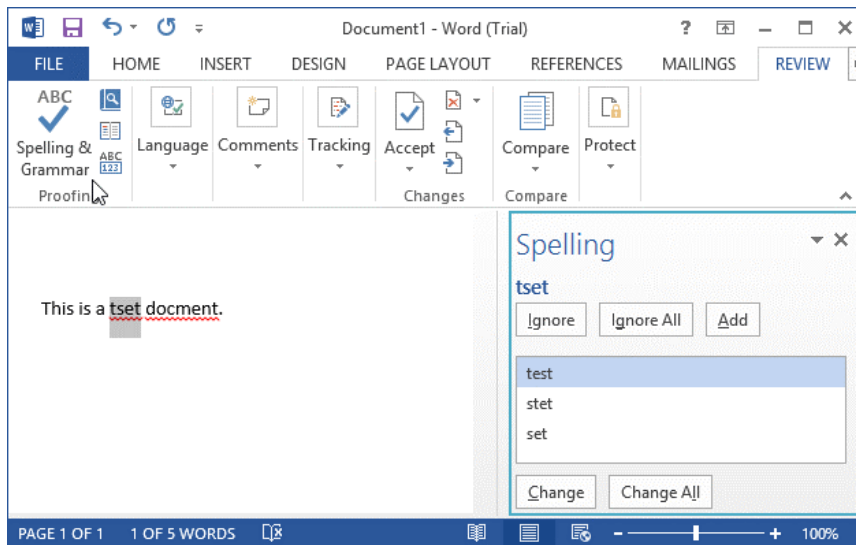


Figure 1.28

1. Word will move through each error until you have reviewed all of them. After the last error has been reviewed, a dialog box will appear confirming that the Spelling and Grammar is complete. Click on **OK**.

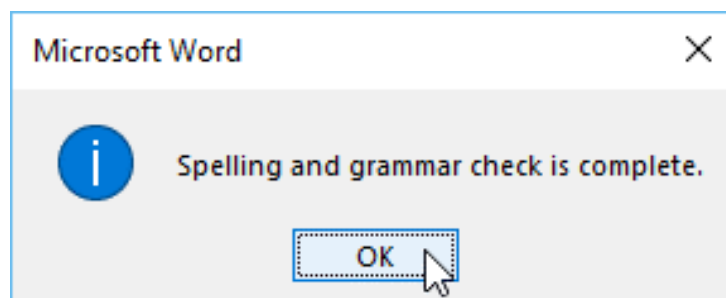


Figure 1.29

Method 2

1. Right-click one of these underlined words (in some versions of MS Word you may need to left-click instead).
2. Select the correct spelling from the suggested list to correct the spelling error. For each error, Word will offer one or more suggestions. You can also choose to ignore the spelling error prompt or add the word to Word's dictionary as shown in Figure 1.30.

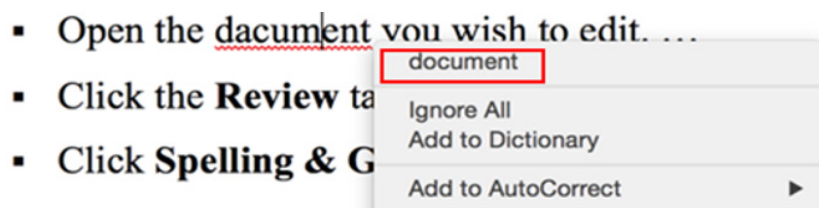


Figure 1.30

J. How to Correct Grammatical Errors

Words with a **double-blue underline** indicate a possible error with grammar.

Steps:

1. Right-click the **underlined word or phrase**. A menu will appear.
2. Click the **correct word or phrase** from the listed suggestions. (The **corrected word or phrase** will appear in the document as shown below);

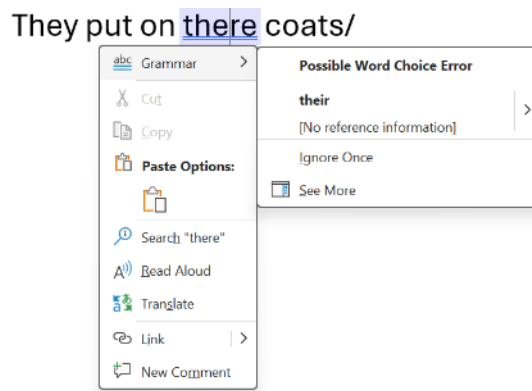


Figure 1.31

K. How to Use the Synonyms Tool

Sometimes you want to replace a word with a synonym. You could do this the old-fashioned way by looking up synonyms in a thesaurus, but some word processors have synonym tools built in.

Steps:

1. Right-click a word you wish to find a synonym for.

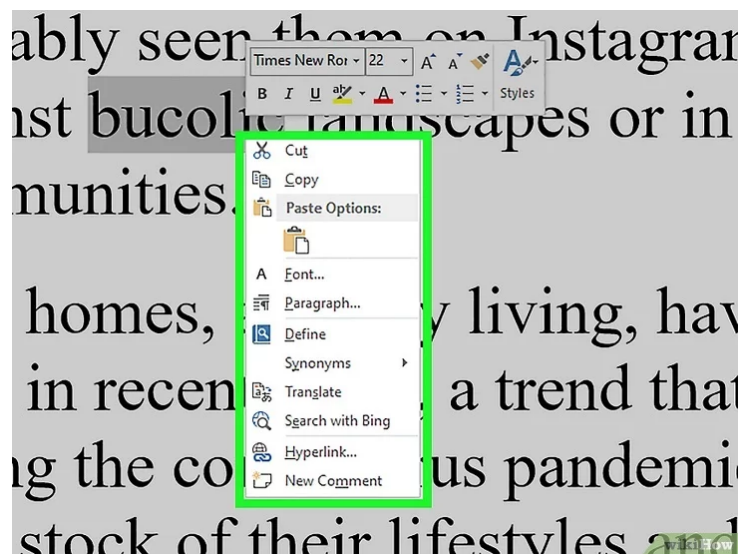


Figure 1.32

2. Click the **synonyms command** from the pop-out menu.

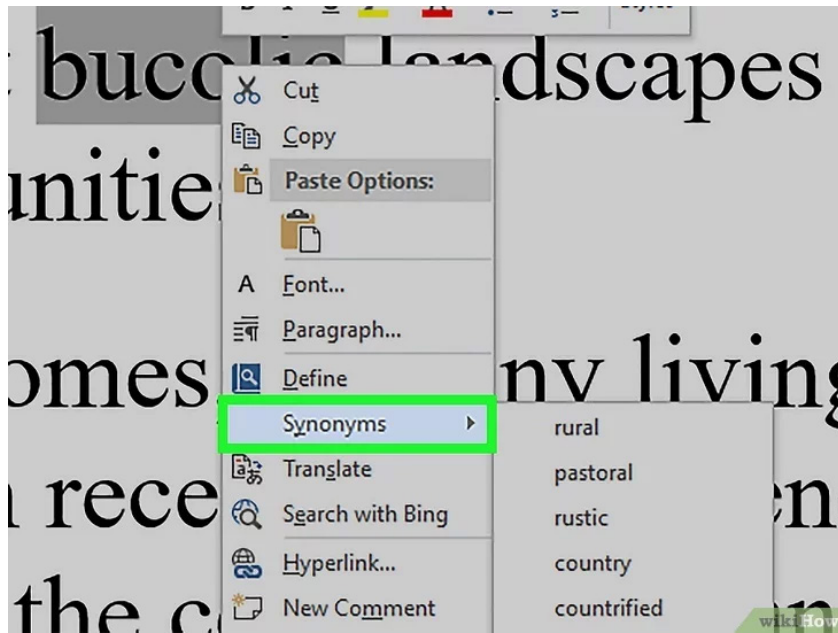


Figure 1.33

3. Find a desired word in the list and click it to replace the original word.
4. If none of the synonyms are desired, click the **Thesaurus** option to open the full thesaurus. The Thesaurus pane will appear.

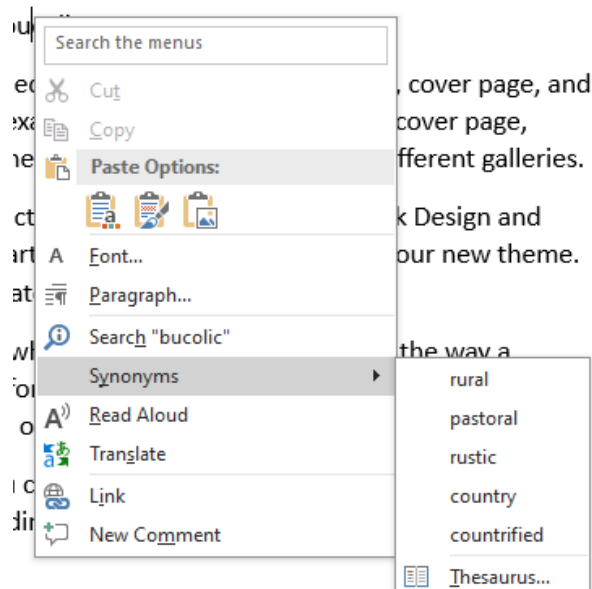


Figure 1.34

5. Find a desired word in the Thesaurus pane list, right-click it and then click *Insert*.
6. Close the Thesaurus pane.

Activity 1.12

1. Open a Word file you saved earlier or a file given to you by your teacher.
2. Save this file with a different filename if you need to keep the original file unedited.
3. Click on *Save* or use the keyboard shortcut (Ctrl + S) to save your changes as you work through steps 4 to 7.
4. Replace some of the words in the documents with misspelt words using Find/Replace. Some words in the document will now be underlined with a red wavy line.
5. Make some deliberate grammatical errors in the text (e.g. try using ‘too’ when it should be ‘two,’ or ‘there’ instead of ‘their’). Some word(s) will now be underlined with a double-blue line.
6. Correct these spelling and grammar errors as per the instructions above.
7. Use the Synonym tool to change a word or phrase in the document to another word or phrase that means exactly or nearly the same.

Extended Reading

- Joan Lambert. (2021). Microsoft Word step by step. Pearson Press
- Page, A., Karl, H., Levine, D., & Lincoln, H. (2020). Computing. OUP: Oxford

FORMATTING A WORD DOCUMENT

The goal of formatting is to make documents easier to read and more attractive by changing the text’s appearance and layout. This involves adjusting font, style, colour, size, alignment, and adding elements like images.

The process of formatting includes these steps:

- Selecting text,
- Applying changes, and
- Using tools from the ribbon tabs or keyboard shortcuts.

Effective formatting helps distinguish different parts of the text and highlights important information.

Small caps for headers

When to use small caps for headers:

It is good to use capitalised text for headings and subheadings as that will easily distinguish it from body text. Small caps can be used as a form of emphasis that is less dominant than all uppercase text. Applying the small caps format gives initial letters full-sized capitals while the remaining letters get small capitals, as illustrated here: TEXTWITH SMALL CAPS, TEXT WITH NORMAL CAPITALS.

It is not advisable to capitalise text (small caps or otherwise) for the body of a paragraph because it makes it difficult to read.

Formatting Shortcuts

There are many combinations of keys on the keyboard (a.k.a. keyboard shortcuts) that can be used for formatting. Keyboard shortcuts let you perform common tasks like saving, inserting page breaks, and changing fonts without touching the mouse.

As a result of Word's evolution, most editing tools have more than one keyboard shortcut. A new set of keyboard shortcuts came with Word 2007's new ribbon feature but the traditional shortcuts still work.

Some common formatting shortcuts include:

Shortcut Key	Functions
Ctrl + I	Italicise text
Ctrl + B	Bold text
Ctrl + U	Underline text
Ctrl + <	Decrease font size
Ctrl + >	Increase font size
Ctrl + =	Subscript (type very small text just below the line)
Ctrl + Shift + '+'	Superscript (type very small text just above the line)
Alt + H, 7	Change case

Table 1.3

NOTE: Use *Cmd* instead of *Ctrl* if you're using a Mac.

Watermarks

A watermark is a faint design put over the text of the document. Watermarks are used to protect content, indicate the status or classification of a document, and add branding.

They are a visual reminder to the reader of what document they are reading is, and how they should manage the contents.



Figure 1.35

Tables and Illustrations

A table is an arrangement of information in rows and columns containing cells. Tables can be used to organise content and make it easier to read.

The inclusion of graphics in a document has many uses and benefits such as:

- Helping to communicate ideas visually
 - Standing out and grabbing the reader's attention
- To add a table or an illustration to a document, use the tools from the *Tables* and *Illustrations* groups in the *Insert* tab. When a table or illustration is added, extra tabs are added to the ribbon to provide table-specific or illustration-specific editing options. One tab is added to handle the further editing and formatting of these graphic objects.

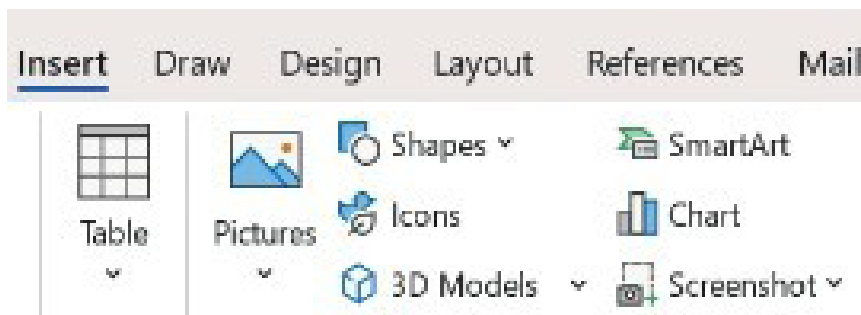


Figure 1.36

Now that you are familiar with the concept of formatting, let's look at how to apply some basic formatting skills to our text. [Pop up]

Basic Formatting

A. How to apply font style, font colour, and font size changes to a text

Steps:

1. Select the text you want to emphasise.
2. Then either
 - Right-click the highlighted item and click **B**, *I* or U (for bold, italic or underline) as shown in Figure 1.37.
 - Click **B**, *I* or U on the Home tab Ribbon (*Font* group).



Figure 1.37

- Use the keyboard shortcuts: bold (*Ctrl + B*), italic (*Ctrl + I*), or underline (*Ctrl + U*). Use *Cmd* instead of *Ctrl* for Macs.
3. Click **B**, *I* or U again or the *Undo* button to cancel the format change.
 4. Similarly for changing the font style, size, and colour of writing, first select the text.
 5. Then choose the formatting options you want from the *Font* group – see Figure 1.38.

Use the down arrows to see more sizes and colours.

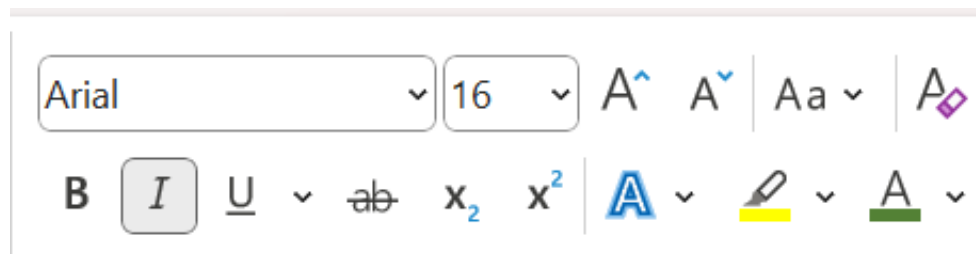


Figure 1.38

6. Formatting settings can be turned on in advance of text being entered. If the settings for *Font* were as shown in Figure 1.38, then the text entered would be in the Arial font, italicised, size 16 and green.



Figure 1.39

7. The *Font* dialogue box (Figure 1.40) can also be used to set formatting styles. This can be accessed by clicking on the arrow as shown in Figure 1.39.

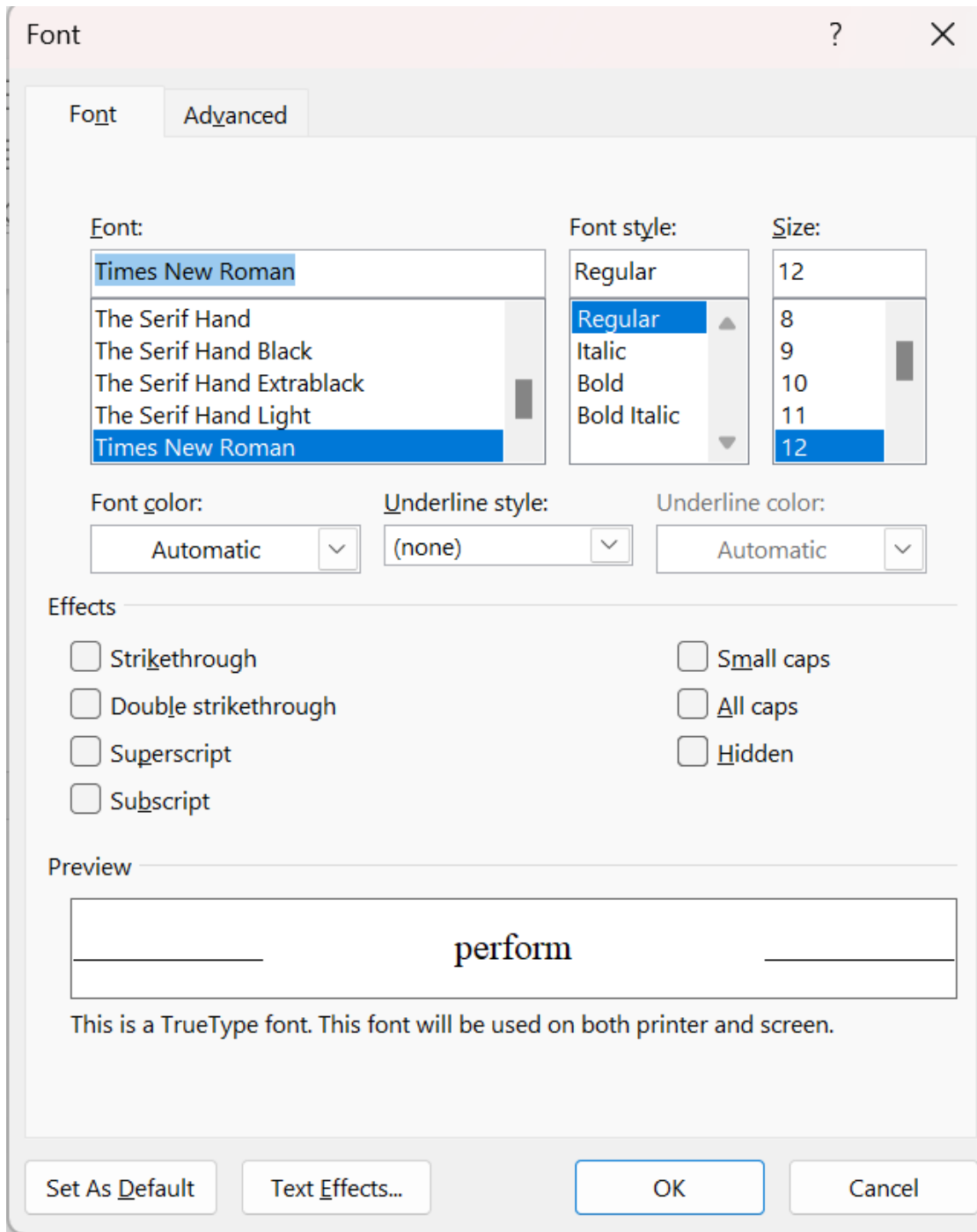


Figure 1.40: *Font* dialogue box

B. How to use the change capitalisation tool

Steps:

1. Select the text you want to change.
2. Click on the arrow beside the *Change Case* tool.
3. Choose the case that suits your needs from the list of options – see Figure 1.41.

4. *Small caps* can be applied using the Font dialog box (Figure 1.40).

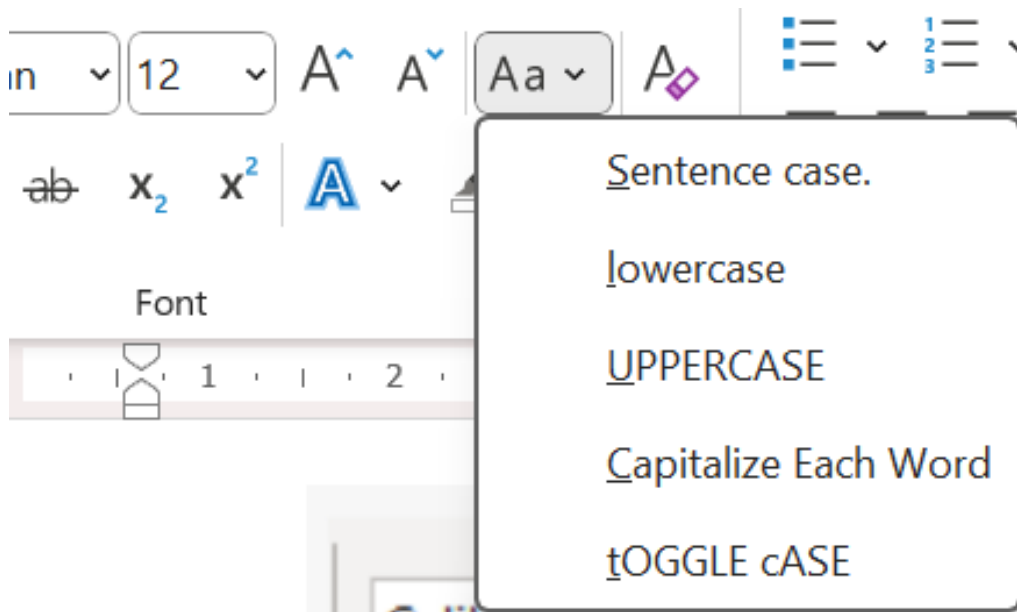


Figure 1.41

C. How to use the format painter tool

Steps:

1. Select the text or graphic that has the formatting that you want to copy.
2. On the *Home* tab, select *Format Painter* in the *Clipboard* group as shown in Figure 1.42.

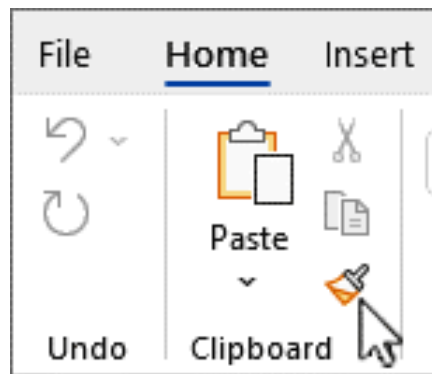


Figure 1.42

3. The cursor changes to a paintbrush icon.
4. Use the brush to paint over a selection of text or graphics to apply the formatting.
5. To stop formatting, press *ESC*.

Activity 1.13

1. Open a Word file that you saved earlier or a file given to you by your teacher.
2. Save a copy of this file with a different filename if you need to keep the original file unedited.
3. Click on *Save* or keyboard shortcut (*Ctrl + S*) to save your changes as you work through steps 4 and 5.
4. Experiment with making formatting changes as instructed above or make the formatting changes specified by your teacher.
5. Use *Format Painter* to quickly apply the same formatting, such as colour, font style, size, and capitalization to other parts of the document.

Tables Guidance (Using Tables in MS Word)

Have you encountered a situation where there is a need to organise data in a grid or tabular form? Some forms of data are better presented in a table than a paragraph of text. For instance, the clearest way to present the assessment scores of multiple students is to use a table. See Table 1.4.

NAME OF STUDENT	EXER 1	EXER 2	HOMEWORK	EXAM
Isaac Ansah	3	5	10	60
Emmanuel Acquah	4	5	9	67
George Adjei	7	6	10	65
Irene Gyamfuah	6	6	8	65

Table 1.4: A table of student assessment scores

D. How to insert a table

1. Open the document you wish to edit and left-click where you wish to insert the table.
2. Click on *Insert* tab.
3. Click on *Table* group.

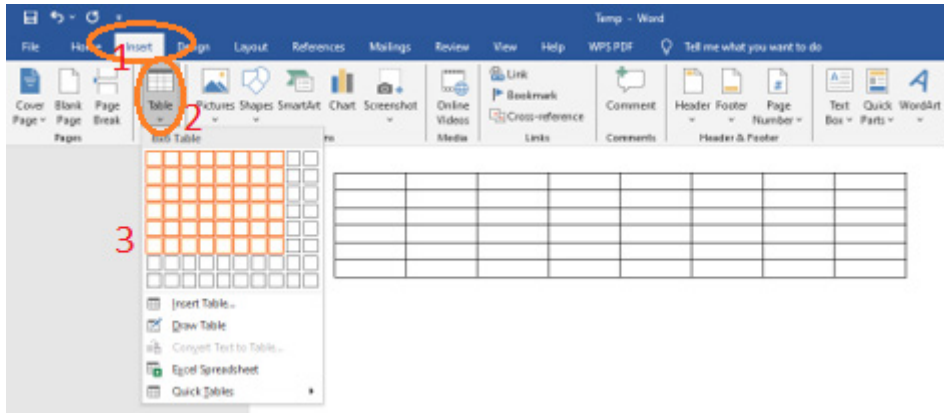


Figure 1.43: Inserting a table in Word

4. Move the cursor over the grid to select the number of rows and columns you want and click to insert the table – see Figure 1.43.
5. Enter the contents into your table. Use the *Tab* key (which should be on the left-most side of your keyboard, just above *Caps Lock*) to move from one cell to the other in your table. You can also left-click the cell you want to type in.
6. When you click anywhere inside the table, two additional tabs (contextual tabs) may appear in the Ribbon: **Table Design** and **Layout** – see Figure 1.44. The buttons in these tabs will enable the user to format and edit the table.
7. Use the *Insert* and *Delete* buttons in the *Layout* tab to add/remove rows/columns respectively, if required.

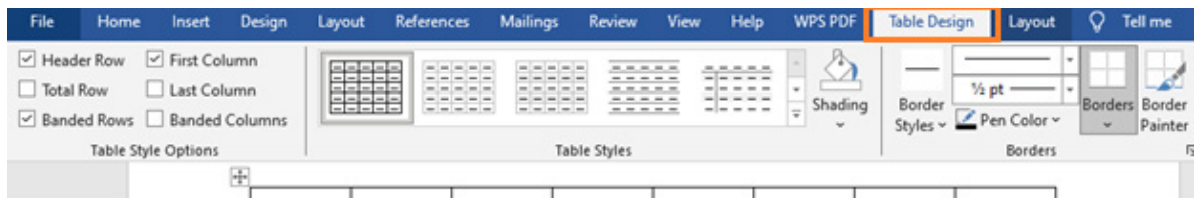


Figure 1.44

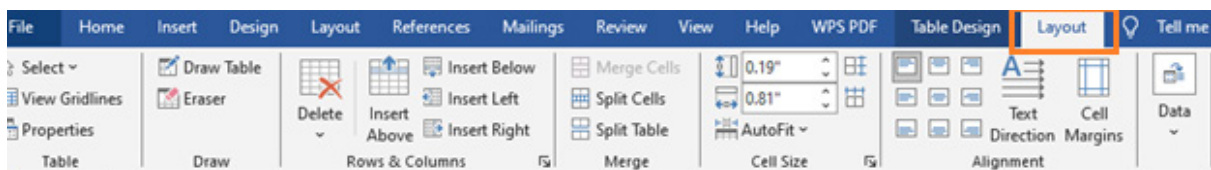


Figure 1.45: Table tools ribbon group

E. How to add a border and shading to a table

1. To add a border, first select a cell, multiple cells, or the whole table. Borders will only be added to the cell or cells you have selected.
2. Specify the border style. As indicated in Figure 1.46, you can individually select a border line style, weight (i.e. thickness), and colour using the buttons from the

Table Design tab, or use an existing border style. Use the arrows to see the full range of options.

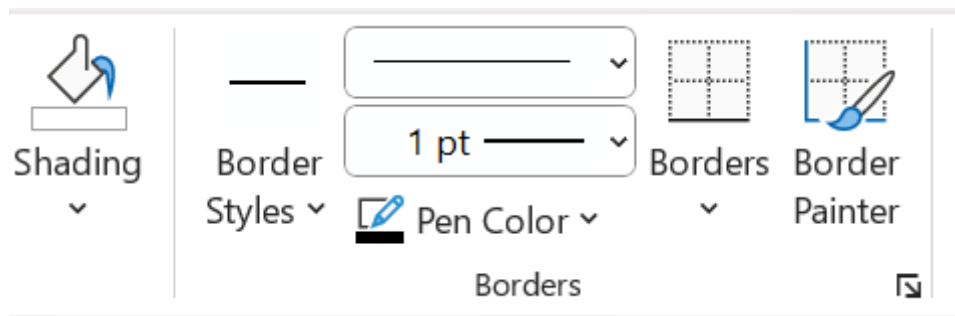


Figure 1.46: Table borders and shading in Word

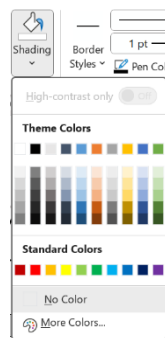


Figure 1.47: Shading colours list

1. Similarly for shading, first select the cell, multiple cells, or the whole table that you want to add shading to.
2. Click on the *Shading* list arrow in the *Table Design* tab.
3. Choose the shade colour from the given palette of colours.

Activity 1.14

1. Create a table in Word with four columns and six rows. Save using the filename 'Hardware Table.' Save regularly as you complete steps 2 to 10.
2. The first row should be populated as follows (these are the 'headers' of the table):

Input	Output	Processing	Storage
-------	--------	------------	---------

3. Insert another row below the first row. For each cell in this new row, add the name of a hardware item which fits the category of the column it is in. Keep adding rows and hardware items until you can't think of anymore.
4. Shade each column with a different colour.

5. Insert another column to the right side of the table and use 'Communication' as the header (i.e. write it in the first row of the new column). Then add some communication hardware items (e.g. Modem, Router, NIC, Switch, Hub) to the cells below it, as you did before for the other categories.
6. Embolden each word in the first row.
7. Capitalise all words in the first row in a single operation.
8. Apply a 3 pt black outside border to the table.
9. Change the font colour of the first input device in the first column.
10. Use the Format Painter to to:
 - a. Copy the formatting applied in step 9 to the remaining input devices.
 - b. Copy the shading from the second column to the last column.

Adding Graphics to Word Document

When working with a word processing application such as MS Word, there are instances where you may be required to incorporate graphics. Graphics include pictures/images and clip art.

F. How to add a watermark to your document

Steps:

1. On the *Design* tab, click *Watermark*.

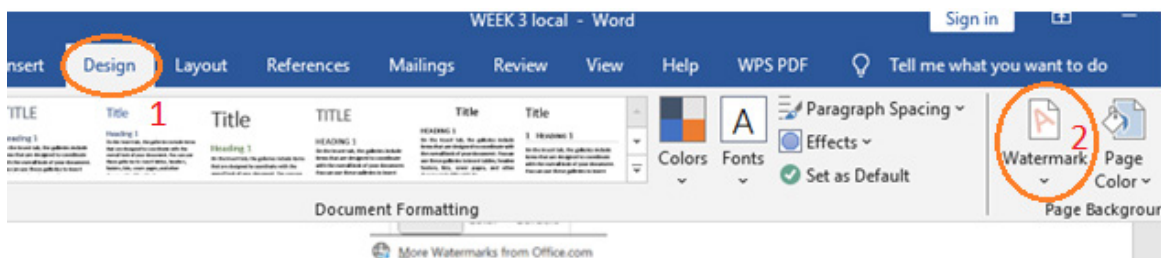


Figure 1.48

2. Choose *Custom Watermark*.

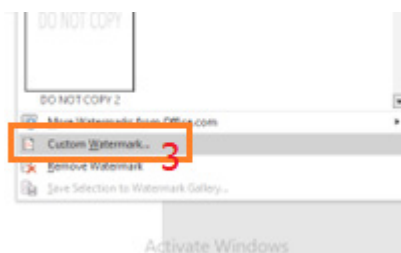


Figure 1.49

3. Choose the text or picture option and customise to suit your requirements.

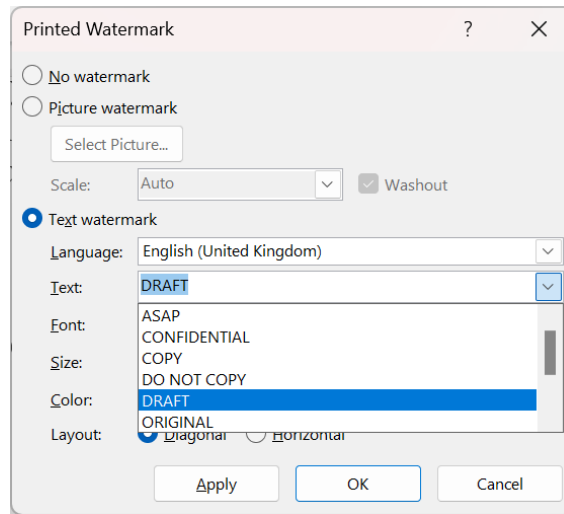


Figure 1.50

G. How to insert a picture

1. Imagine you have been asked to create a letter head for your school using MS Word. You'd need to insert the school's logo at top, but how would you do that? Create or open an existing document and position the cursor at the location you want the logo to be.
2. On the Insert tab, click Pictures.

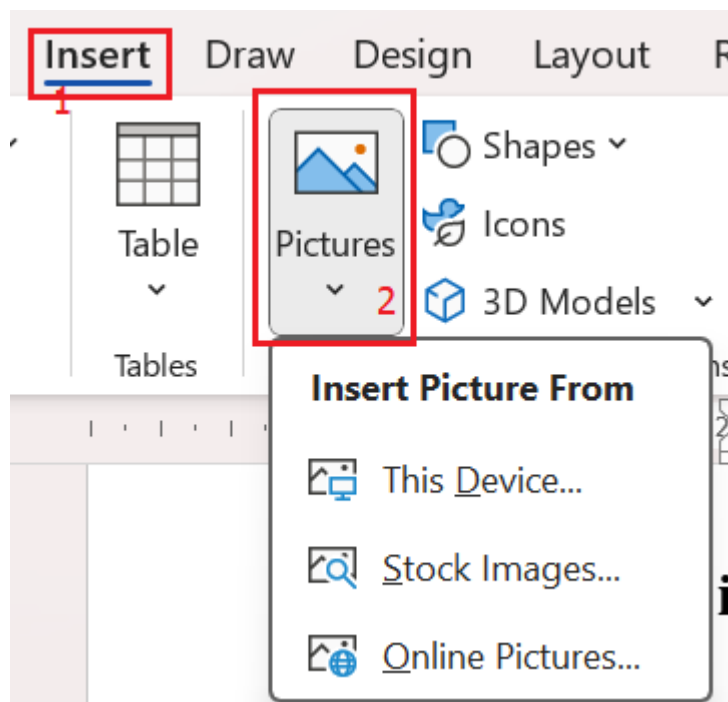


Figure 1.51

3. Then do one of the following:
 - Click *This Device* for a picture on your computer.
 - Click *Stock Images* for high quality images or backgrounds. This option requires an Internet connection.
 - Click *Online Pictures* to search for a picture on the web. This option also requires an Internet connection.
4. Select the picture you want, and then click *Insert*.
5. Use the tools in the *Picture Format* tab to format and edit the picture.

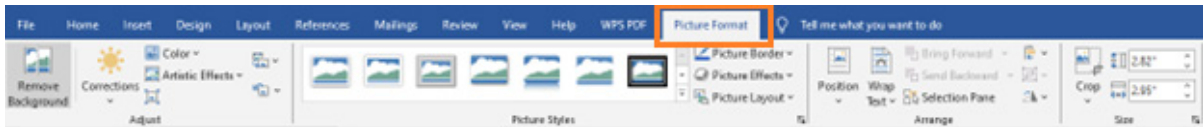


Figure 1.52

Activity 1.15

Let us insert an image into a sample document using the first option in step 2 above (*This Device*):

1. Open an existing or create a sample word document and name it letter head
2. Click at where you want the image or picture (logo) to be placed in the document
3. Click the **Insert** tab
4. Click the **Pictures** command button

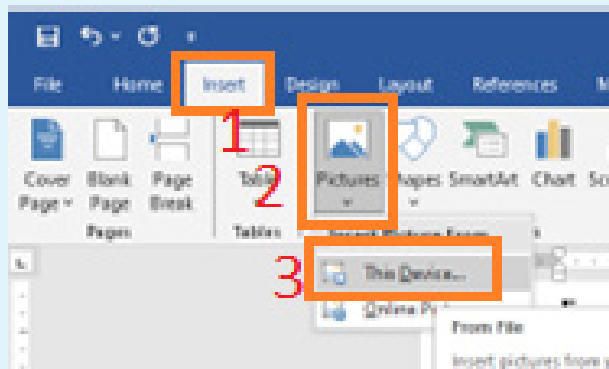


Figure 1.53

- I. Click **This Device** from the drop-down menu and browse to the **Pictures** folder (assuming the image is saved in the **Pictures** folder on the computer)

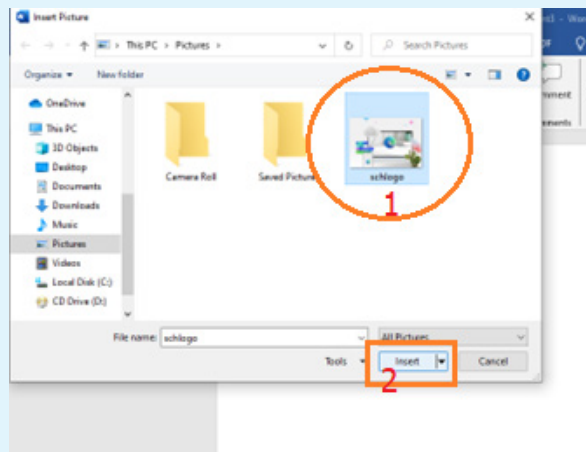


Figure 1.54

- II. Click on the image (logo) to select it and click the **Insert** button at the right bottom of the **Insert Picture** window.

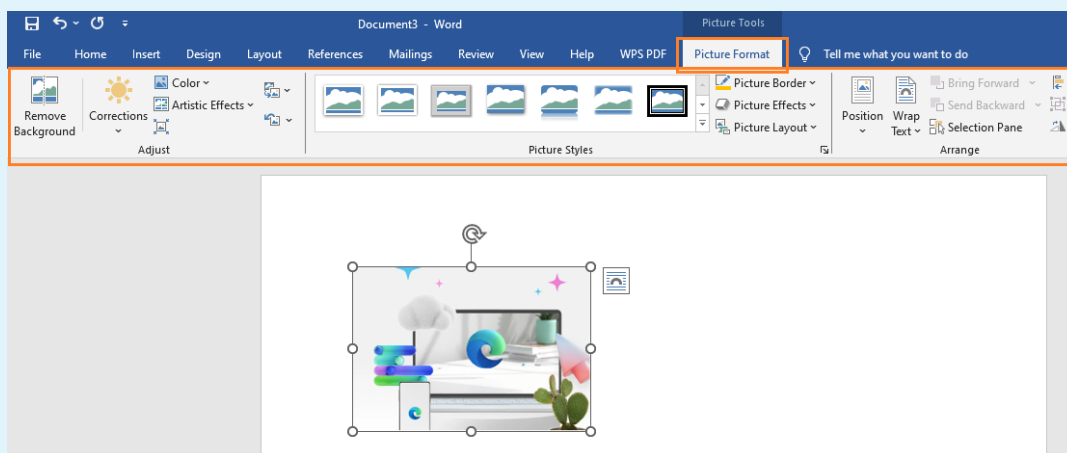


Figure 1.55

- III. As stated earlier, proceed to format (resize, reposition and more) the picture using the Picture Format tools. Remember to save your document as you work.

Activity 1.16

1. Create a new document and save using the filename 'Hardware Images'. Save regularly as you complete steps 2 to 5.
2. Set font to Calibri, size 16, colour Red and add to the following headings to the first three pages: Input Devices, Output Devices, Storage Devices.
3. Insert images (stock images, images from the internet, or images provided by your teacher) of hardware devices/media in each page to match the page heading.
4. Add a different colour border to each input device that you have inserted.
5. Add the watermark 'Confidential' to the pages in your document.

Activity 1.17

1. Create a new document and save using the filename 'Software Images'. Save regularly as you complete steps 2 to 5.
2. Add the following headings to the first two pages: Applications Software, Systems Software.
3. Format both headings to make them more prominent and attractive.
4. Add a short description to match each heading.
5. Change the colour, font type and size of the first description.
6. Copy the format for the first description to the second description (on page 2) in a single operation.
7. Insert images (stock images, images from the internet, or images provided by your teacher) in each page to match the page heading.

Extended Reading

Video on formatting text in MS Word. Click on the links below to watch the videos:

<https://youtu.be/ViGf0RKbCyA>

<https://youtu.be/Fvrtt0h84Mg?si=0osUTc245BetnNLD>

DOCUMENT LAYOUT

Now let's explore how to use these formatting styles to produce a beautiful document.

[pop up]

A. How to adjust the page setup settings – orientation, columns, and margins

1. Select the appropriate button from *Page Setup* group in the *Layout* tab – see Figure 1.56.

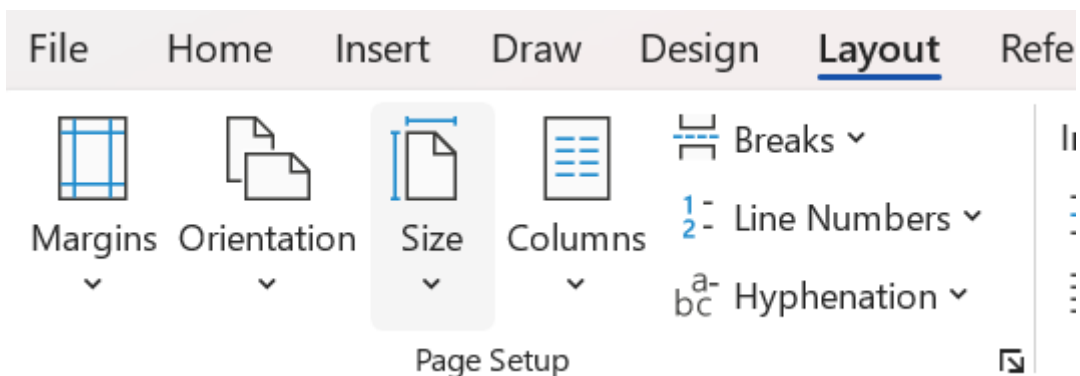


Figure 1.56

2. **For orientation:** select *Landscape* or keep it as portrait. See Figure 1.57.

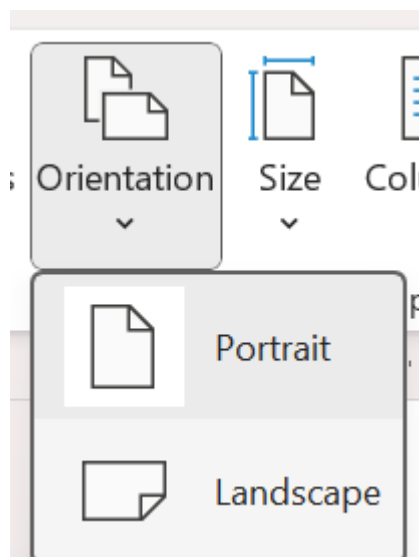


Figure 1.57

3. **For columns:** the content of a page can be presented in columns by selecting the required number of columns as shown in Figure 1.58. To only change the

number of columns for a particular paragraph or section of text, highlight the text you want to change before selecting the number of columns.

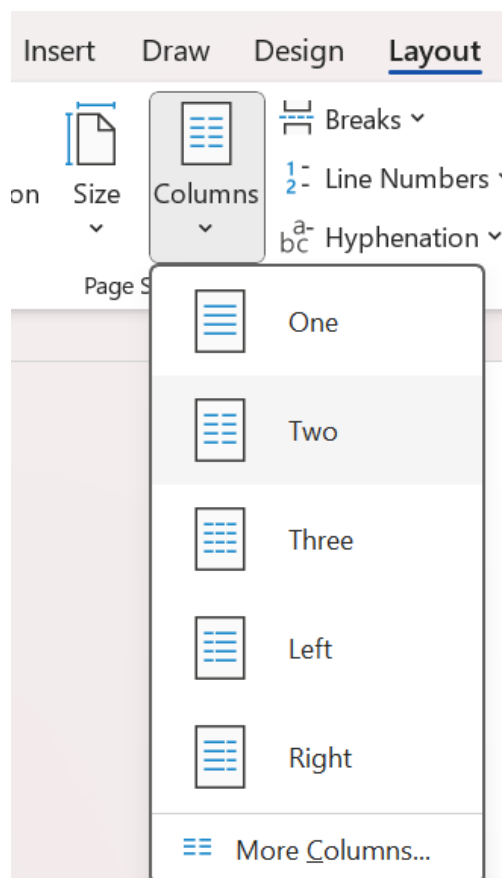


Figure 1.58

4. Many of the page settings can also be made via the *Page Setup* dialogue box which can be displayed by clicking on the arrow in the bottom right-hand side of the *Page Setup* group (see Figure 1.56).

The default page margins are shown in Figure 1.59 and can easily be changed.

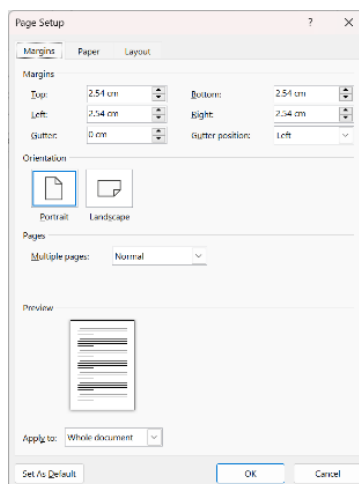


Figure 1.59

- Clicking on *Layout > Borders* will display the *Borders and Shading* dialogue box (Figure 1.60) from where you can apply a page border of different styles and thickness, and a colour shading to the document paragraphs. Selecting a paragraph in advance will apply the border settings to that paragraph only.

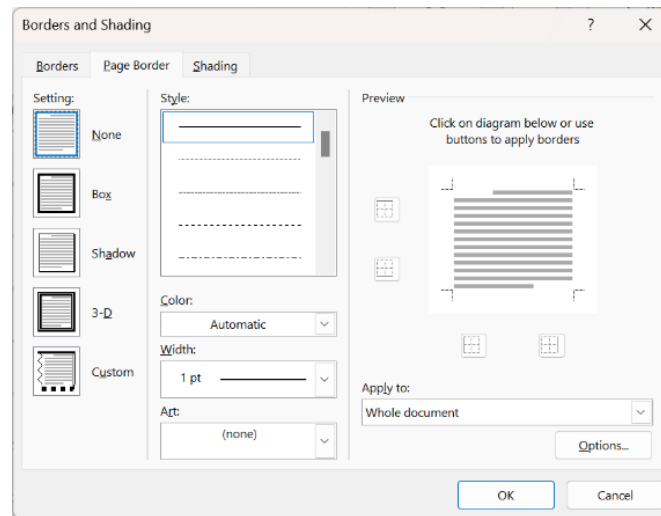


Figure 1.60

- To apply a page border:** go to *Design > Page Borders* and set the style, colour, etc. of the border.
- To insert a page break:** go to *Layout > Breaks > Page* (see Figure 1.61). Alternatively, you can use the keyboard shortcut *Ctrl + Enter* (*Shift + Enter* for a Mac).

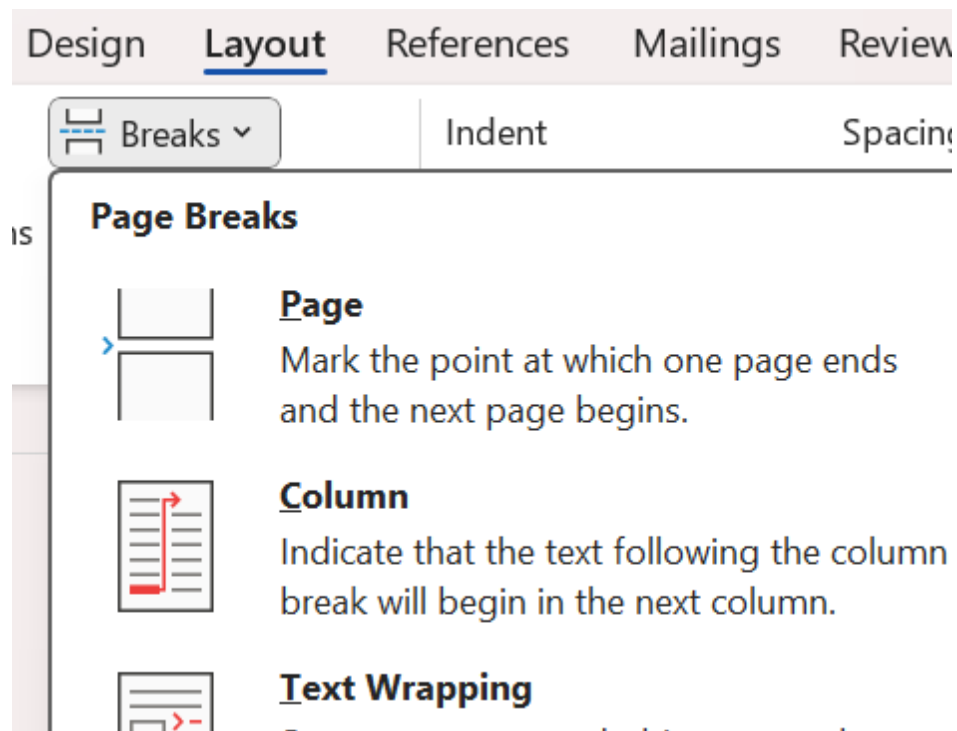


Figure 1.61

8. You can also apply **pagination settings** from the *Paragraph* dialogue box (Figure 1.62) so that headings and paragraphs behave the way you want them to.

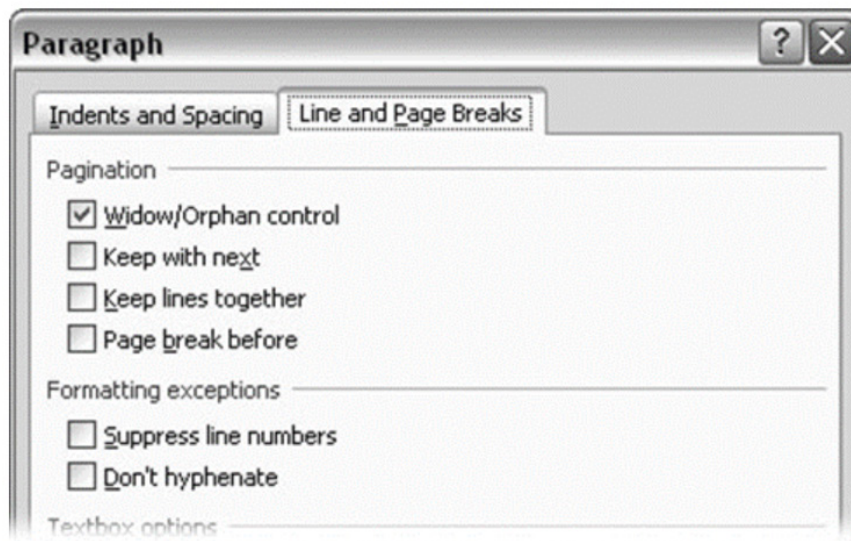


Figure 1.62

There are four settings:

1. **Widow/Orphan control:** Single lines abandoned at the top (widows) or bottom (orphans) of the page look out of place. Turn on this checkbox, and Word keeps the whole family, er, paragraph together.
2. **Keep with next:** Certain paragraphs, like headings, need to stay attached to the paragraph that comes immediately after them. Choose the *Keep with next* option for your headings, and they always appear above the following paragraph.
3. **Keep lines together:** Sometimes you have a paragraph that shouldn't be split between two pages, like a one-paragraph quote or disclaimer. Use this option to keep the paragraph as one unit.
4. **Page break before:** Use this command with major headings to make sure new sections of your document start on a new page.

B. How to add a header and footer

1. Select *Header* or *Footer* from the *Insert* tab (Figure 1.63).

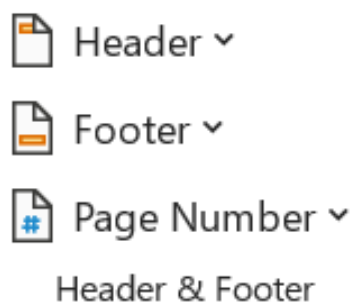


Figure 1.63

1. Select *Edit Header* or *Edit Footer*.
2. The *Header & Footer* tab (Figure 1.64) appears, and by default, the cursor is in the centre section of the header/footer.
3. Type the text you want in the header/footer.
4. More options such as inserting page numbers can be set in the *Header & Footer* tab.
5. Select *Close Header and Footer* when finished.

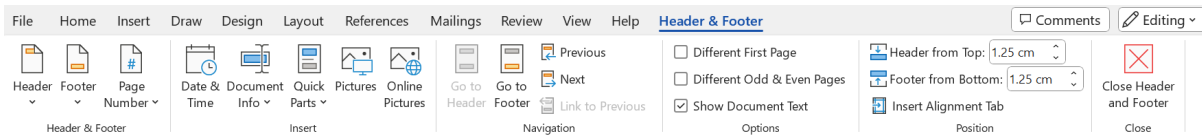


Figure 1.64: *Header & Footer* tab

Activity 1.18

1. Open a Word document that you saved earlier, or a file given to you by your teacher. This Word document should have at least 4 pages.
2. Save this file with a different filename. Click on *Save* or use the keyboard shortcut (*Ctrl + S*) to save your changes as you work through steps 3 to 9.
3. Add 'Practicing Word Tools' as a header, and your name and page number as a footer.
4. Change the top and bottom page margins to 3cm and the left and right margins to 2cm.
5. Insert a page break at the end of the last page and copy and paste some text to populate the blank page that results.
6. Select the first paragraph of the first page and change the format from one to three columns.
7. Change the format of another paragraph (you choose which one) to two columns.
8. Change the page orientation to landscape for the whole document.
9. Add a 3pt black line border to one of the single column paragraphs in the document.

C. How to set paragraph alignment

Text or paragraph alignment is a paragraph formatting attribute that determines the appearance and orientation of the edges of a text or paragraph. The easiest ways to change alignment are to use the alignment buttons on the formatting toolbar or the keyboard shortcuts.

There are four different ways to align a text or paragraph. These are;

1. Left align
2. Center align
3. Right align
4. Justified

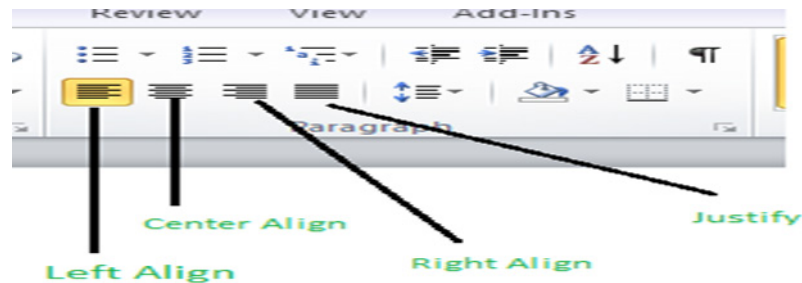


Figure 1.65: Alignment option (command buttons) on formatting toolbar

Figure 1.66 describes the four types of text alignments mentioned above, in a word document, with sample illustrations:

Align Left

Align the lines in the paragraph flush on the left side and ragged on the right. Left alignment is standard for letters, reports, and many business documents. To do this, click on the Align Left symbol on the paragraph group or use keyboard shortcut *Ctrl + L*.

Align Centre

Align the lines in the paragraph in the middle. Centre alignment is common for things you want to stand out, like titles. To do this, click on the Align Centre symbol on the paragraph group or use keyboard shortcut *Ctrl + E*.

Align Right

Align the lines in the paragraph flush on the right side and ragged on the left. Right alignment is probably the rarest alignment in documents written in Left-To-Right languages like English. However, it is much more common in Right-To-Left languages like Arabic. To do this, click on the Align Right symbol on the paragraph group or use keyboard shortcut *Ctrl + R*.

Justified

Align the lines in the paragraph flush on the left *and* right side, unless it's not a full line, in which case align left. Notice that the spaces between words need to stretch a bit to achieve this. Justified alignment is standard in newspapers and multi-column documents. To do this, click on the Justify symbol on the paragraph group or use keyboard shortcut *Ctrl + J*.

Figure 1.66: Description of various text alignments and how they display

Here are the steps to follow to set align text:

1. With your document open, select the *Home* tab.
2. Highlight the text you want to align and set the alignment by either using the alignment buttons in the *Paragraph* grouping (highlighted in Figure 1.67) or using the keyboard shortcuts detailed below.

Using the text alignment command buttons:

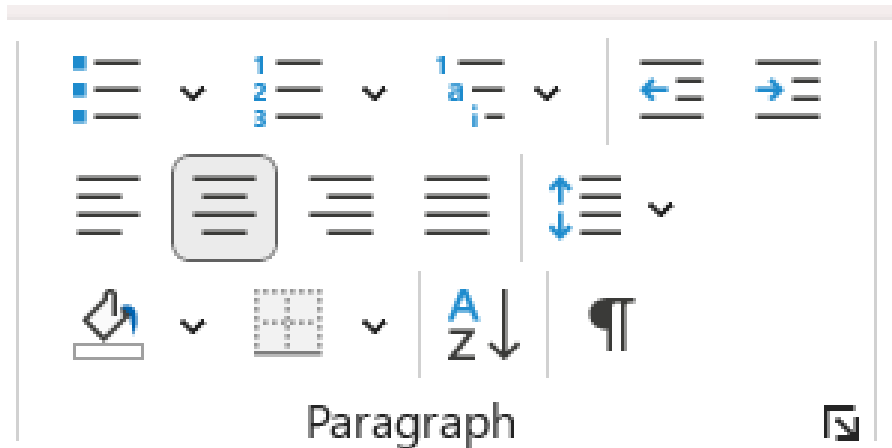


Figure 1.67

Using keyboard shortcuts

1. To align the text left: (*Ctrl+L*)
2. To align the text right: (*Ctrl+R*)
3. To centre the text: (*Ctrl+E*)
4. To fully justify the text: (*Ctrl+J*)

NOTE: Use *Cmd* instead of *Ctrl* if you are using a Mac keyboard.

Activity 1.19

In a Word document, write a short paragraph about your favourite book, film, or TV show. Then copy and paste the paragraph until you have four copies of it.

Video provides a powerful way to help you prove your point.
 Video provides a powerful way to help you prove your point.
 Video provides a powerful way to help you prove your point.
 Video provides a powerful way to help you prove your point.

Apply the following alignments to the corresponding paragraphs and pay attention to the differences between them:

Paragraph 1: Align centre

Paragraph 2: Align left

Paragraph 3: Align right

Paragraph 4: Justify

D. How to set spacing between lines



Line spacing can be changed using the **Line Spacing tool** (see Figure 1.68) or the **Paragraph dialog box** (see Figure 1.69).

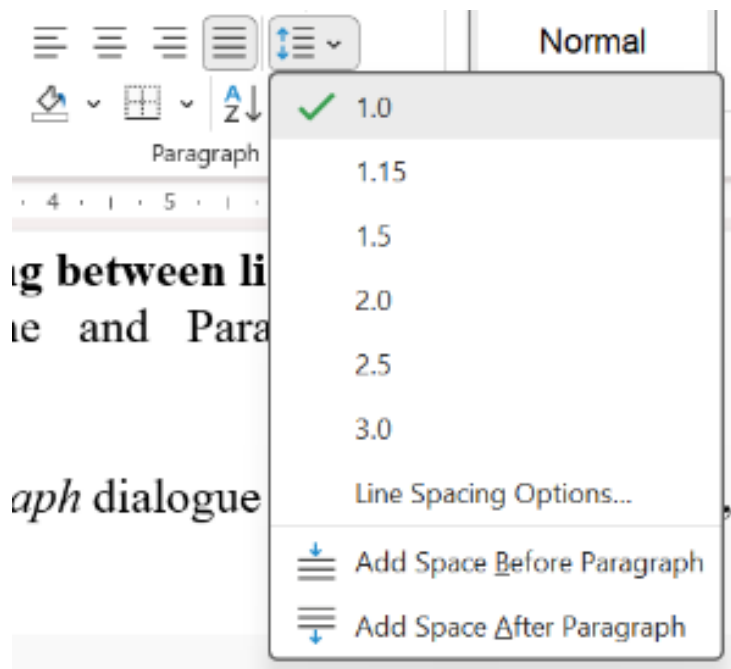


Figure: 1.68

Line spacing using the paragraph dialog box:

Steps:

Click or select the paragraph you want to change the line spacing for.

1. Select the *Paragraph* dialogue box from the *Home* tab. You can also select the text and right-click it, then click the *Paragraph* option from the menu.
2. Set your desired line spacing options in the *Paragraph* dialogue box that appears.

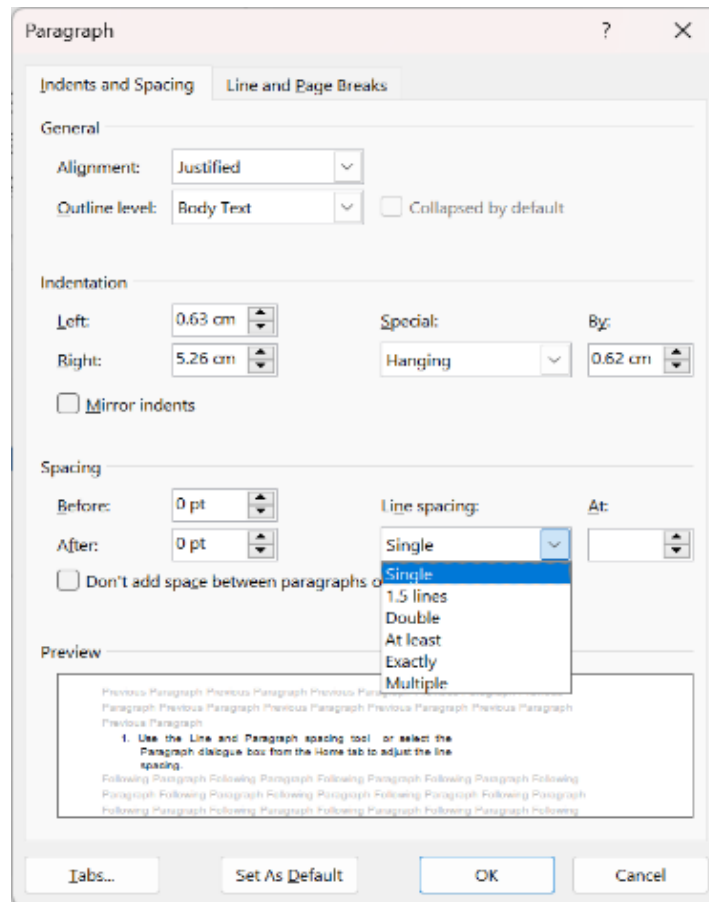


Figure 1.69: Paragraph dialog box

Ghana covers an area of 239,567 km² (92,497 square miles), With over 32 million inhabitants, Ghana is the second-most populous country in West Africa. The capital and largest city is Accra.

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Figure 1.70: Text with line spacing 1.0, 1.5 and 2.0

E. How to indent lines in one paragraph or at the start of every paragraph.

Line indentation

Line indentation refers to the practice of adding a specific amount of space or tab characters at the beginning of a line of text.

Steps:

1. Place the cursor at the start of the line you want to indent.
2. Click on the *Increase Indent* button. 

NOTE: There is also a *Decrease Indent* button next to the *Increase Indent* button.

Paragraph indentation

Paragraph indentation refers to the practice of adding a specific amount of space or tab characters at the beginning of the first line of a paragraph.

Steps:

1. Select the paragraph(s) you want to indent.
Go to the *Paragraph* group in the *Home* tab.
2. Open the *Paragraph* dialogue box to set the type of indent (e.g. first line, hanging) and how much to indent by (see Figure 1.69).
3. Alternatively, drag the indent shapes on the ruler which is situated below the ribbon (see Figure 1.71). The meanings of the different sliders are explained below.

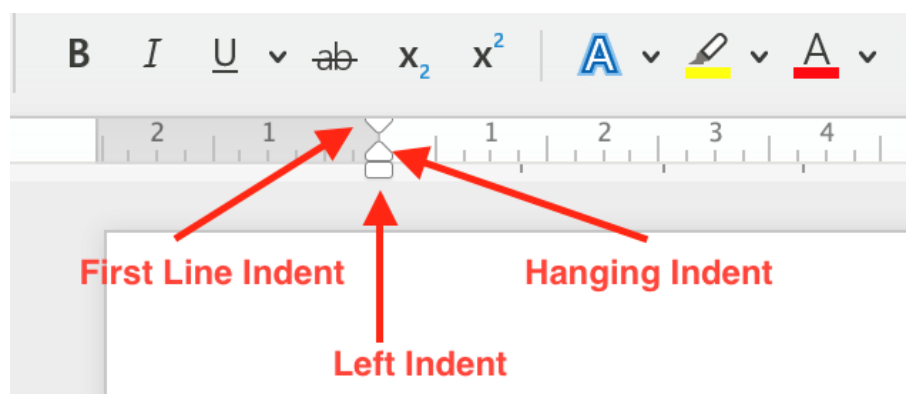


Figure 1.71: Indentation tabs of word's horizontal ruler

NOTE: Here's how the ruler can be used to adjust indentation in different ways:

- **To add or adjust a first line indent:** Find the small arrow/triangle at the top of the ruler. Drag this arrow to the right to indent just the first line of your paragraph. This will only move the first line, leaving the rest of the paragraph in place.

- **For a hanging indent:** Look for the arrow/triangle shape just below the other triangle. Drag it to the right. This will indent every line in the paragraph except for the first line.
- **To adjust the left indent** (i.e. the indentation of text from the left margin): Look at the ruler at the top of your document. There is a small rectangle shape on the ruler, below the two triangles. Drag this rectangle to the right. This moves both triangles at the same time and therefore moves *every* line in your paragraph further from the left margin.

Figure 1.72 shows examples of text with different indentations and the corresponding ruler settings.

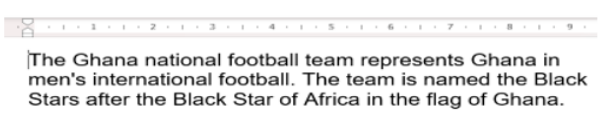
No indent	
First Line indent	
Hanging indent	
Hanging indent	

Figure 1.72: *Text with different indentations*

NOTE: Do not use *Tab* to create a first-line indent. If you use the *Tab* key, you need to remember to hit it at the beginning of every paragraph, and there is a danger of messing up your indents if you change the tab settings.

Activity 1.20

Open a Word document which contains four paragraphs of text, with each paragraph having a left-aligned heading.

1. Use the alignment tools to give a different type of alignment to each heading.
2. Apply 1.5 line spacing to the second paragraph.
3. Insert your name and page number as a footer on each page.
4. Insert a page break at the end of the third paragraph.
5. Use the Ruler to indent the first line of the last paragraph

Activity 1.21

Research and write about any one festival celebrated in Ghana. Follow these instructions to produce your write-up using MS Word or whatever word processor you have available:

1. Use the portrait orientation.
2. Use a two-column layout.
3. Use Justified alignment.
4. The header section should have the name of the festival, and the footer section should have your full name and class.
5. Increase the first line indent for your first paragraph
6. Print and submit the assignment to your teacher.

Extended Reading

- Microsoft Office Step by step 2010 by Cox J., Lambert J., & Frye C. Microsoft Press.
- [Word: Formatting Text \(gcfglobal.org\)](http://gcfglobal.org)
- [How to Format a Word Document to Look Professional: 13 Steps \(wikihow.com\)](http://www.wikihow.com/How-to-Format-a-Word-Document-to-Look-Professional-13-Steps)
- Video on pagination and paragraphs. Click on the link below and watch.
- https://youtu.be/pW4AamU0vGk?si=Wjr1torTjh-cy_Qx

LISTS

Hello learner! today, you will explore how you can enhance lists by sorting, renumbering and customising list styles.

A list is an arrangement of elements created in a sequential fashion, typically with each item shown on its own line and frequently denoted with numbers or bullet points. Bulleted lists, numbered lists and multilevel lists are the types of lists that can be inserted in a word-processed document.

Sorting and renumbering a list means arranging the items in the list in a specific order, such as alphabetical or numerical, and then updating the numbers or bullets accordingly.

Now let us delve into how to create list, edit the list and customise the list styles.

[pop up]

Lists

A list is a series of items that are presented in a structured way using bullets or numbers. This helps to organise information, improve readability, and emphasise key points.

Types of Listing used in MS Word

The types of lists that can be inserted in a word-processed document are bullet lists, numbered lists, and multilevel lists.

Bulleted lists use symbols to separate each item and are useful for listing items that are related or have similar characteristics.

Numbered lists use numbers to separate items and are used to record items that must happen in a certain order such as a sequence of steps or directions. Numbered lists can also be used to document an order of preference or ranking,

Multilevel lists are lists with more than one level. Multilevel lists are used when you want to create an outline of items, where each item can have its own sub list of items.

Examples of two multilevel lists are shown in Figure 1.73;

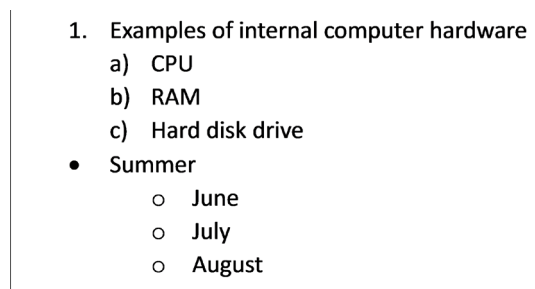
- 
- 1. Examples of internal computer hardware
 - a) CPU
 - b) RAM
 - c) Hard disk drive
 - Summer
 - o June
 - o July
 - o August

Figure 1.73: Multilevel lists

We use the Home tab and Design tab ribbons to create lists. Let us observe critically the various tools/buttons on these ribbons.

Note: The tools needed to create a list are found within the Paragraph Group in the Home tab ribbon.

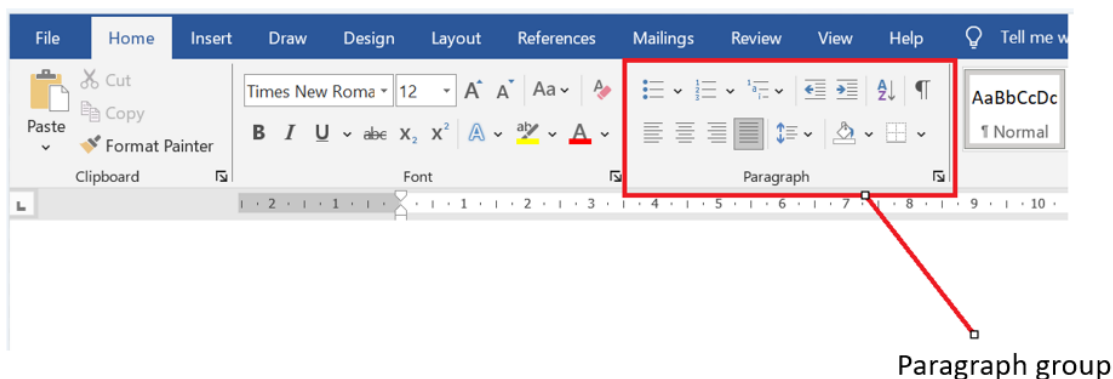


Figure 1.74: Home tab ribbon

Note: Within the Design tab ribbon, the most important part is the document formatting section.

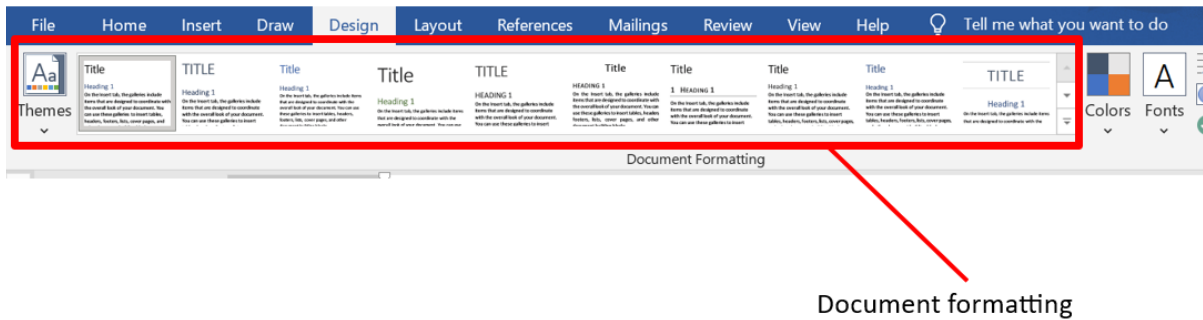


Figure 1.75: Design tab ribbon

Now that you are familiar with the required sections in the Home tab and Design tab ribbons. Let's explore how to create our lists. Launch your MS Word application and follow these steps: [pop up]

A. Creating a bulleted or numbered list

Steps:

1. Position the cursor where you want to insert the bullet list.
2. On the Home tab, under paragraph grouping, click the Bullets button to display the bullet library (Figure 1.76) OR click on the Numbering button (Figure 1.77).

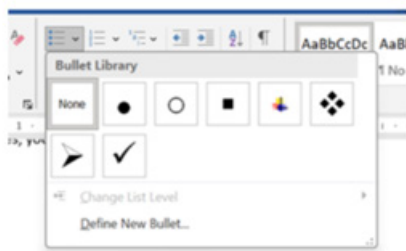


Figure 1.76: Bullet Library



Figure 1.77: Numbering Library

3. Choose a desired bullet or numbering list.
4. Type any text and press Enter key between items to create the desired list.
5. Press Enter key on the keyboard twice to deactivate the selected bullet/numbering.

Note that numbered lists can be numbers, letters, or roman numerals.

Now that have created lists using bullets and numbering, let's look at how multilevel lists are created. [pop up]

B. Creating a multilevel list

Steps

1. Type out the lines of your list, with each item of your list on a different line.
2. In the Paragraph group on the Home tab, click the Multilevel List button in the paragraph group.
3. Choose a list type from the List Library as shown in Figure 1.78.

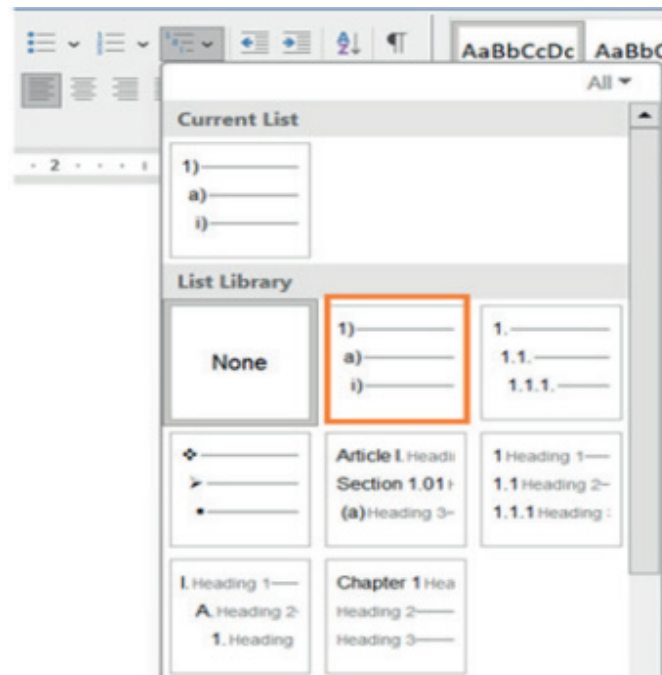



Figure 1.78: Multilevel List Library

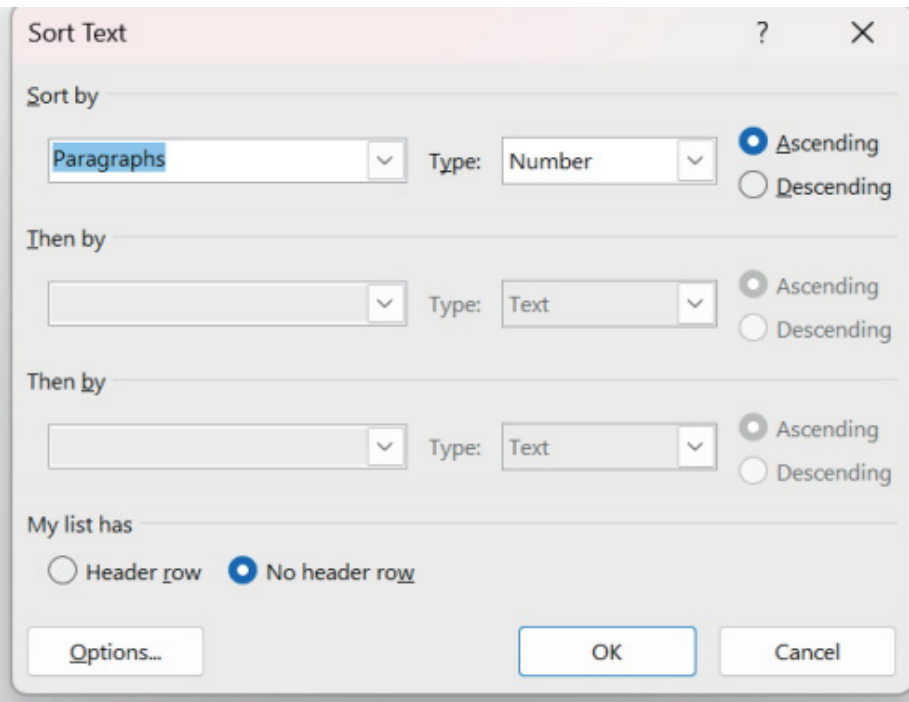
4. Your list will now be formatted in the style you chose but only as a single-level list.
5. On the Home tab, under Paragraph grouping, click the Increase Indent button on any item on the list demote that item to a lower list level
6. Click the Decrease Indent button on the list item to demote it back to the first level list.

Now let us see how to sort a text/number list in a given document.

C. How to sort a text/number list

1. Select the list you want to sort.
2. Go to Home tab > Sort button. 
3. In the Sort Text dialogue box, set Sort by to Paragraphs and Text/Paragraphs and Numbers.
4. Choose Ascending (A to Z) or Descending (Z to A).
5. Select OK.

- 23
- 12
- 45
- 78
- 90
- 67



D. How to sort a text/number list

1. Double-click the numbers in the list. The text won't appear selected.
2. Right-click the number you want to change.
3. Click Set Numbering value and enter values.

These steps are shown in Figure 1.79.

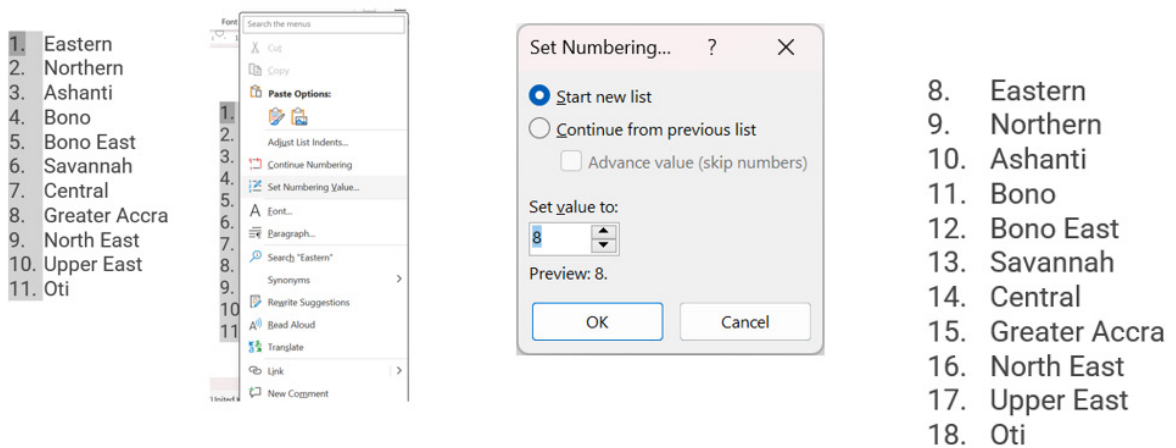


Figure 1.79: Renumbering a list

Now let's do the following activity. Share your results with your teacher or colleagues.

Activity 1.22**Steps:**

1. Create a new document in Word.
2. Save this document using the filename 'Software'. Click on Save or keyboard shortcut (Ctrl + S) to effect changes as you work through steps 3 to 5.
3. Add your name and page number as a footer.
4. Create two lists:
 - i. A bulleted list of three types of systems software. For example:
 - Operating system
 - Utility programs
 - Device drivers
 - ii. A numbered list of the names of at least three examples of application software. For example:
 - Word processor
 - Spreadsheet program
 - Gaming program
 - DBMS
5. Add some pictures to your document to match your chosen software. Insert pictures of software from the picture folder/online.

Use the space below to reflect on Activity **1.22**. How did you find the activity? Include any notes that will help you to complete the task in the future.

We are now going to customise a list style. The following provides instructions on how to do this.

E. How to customise a list style such as defining a new bullet

1. Select the text or bulleted list you want to change.
2. On the Home tab, in the Paragraph group, click the arrow next to Bulleted List , and then click Define New Bullet.
3. Click Symbol and then select the symbol you want to use.
OR
4. Click Picture and then browse for your picture from a file or Bing Image Search. Click Insert.
OR
5. Click Font and then change the font properties to be used for the bullet. You can choose settings on the Font tab or the Advanced tab
6. Click OK.

STYLES

Word **styles** are pre-made sets of font size, colour, and style that you can apply to any text. Using styles will help you to achieve a professional look and feel to your document.

Styles allow you to apply a consistent look across the whole document instead of having to format each section individually and enable you to quickly generate a table of contents (ToC).

Style sets include a combination of title, heading, and paragraph styles. Style sets allow you to format all elements in your document at once instead of modifying each element separately.

Now that you are familiar with the meaning of styles, let us look at how to apply styles to your documents.

A. How to apply a Word style

Steps:

1. Select the text you want to apply a style to or place your cursor at the beginning of the line.
2. In the Styles group on the Home tab, click the More drop-down arrow (Figure 1.80).

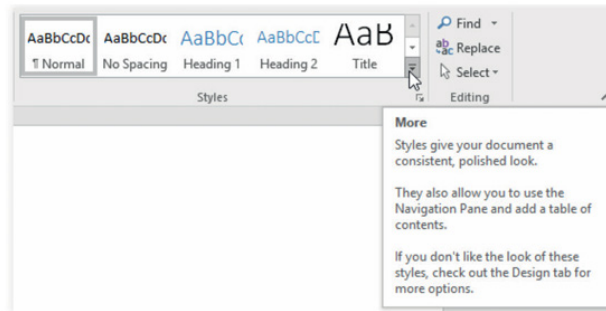


Figure 1.80: Applying a Word Style

3. Select the desired style from the drop-down menu.

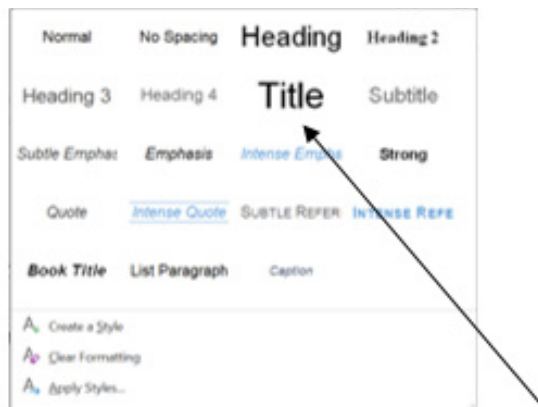


Figure 1.81

4. The text will appear in the selected style.

B. How to apply a style set to your document

1. From the Design tab, click the More drop-down arrow in the Document Formatting group – see Figure 1.82.

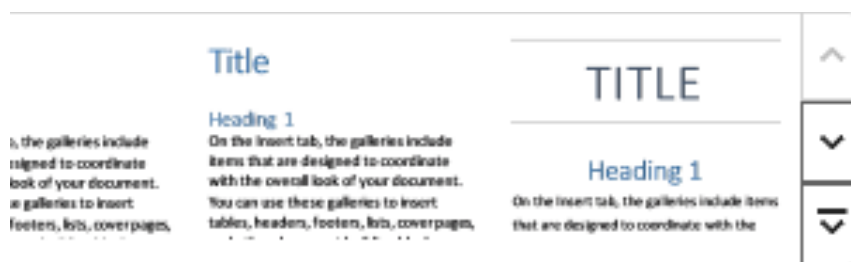


Figure 1.82

3. Choose the desired style set from the drop-down menu.
4. The selected style set will be applied to your entire document.

C. How to generate a table of contents from heading styles

1. By default, any text that you apply a Heading 1, 2, or 3 style to will show up as an entry in the table of contents. Apply heading styles to the text in a document accordingly.
2. Make sure that you have added page numbers to the document.
3. Position the cursor where you want to insert the table of contents in the document.
4. Go to the Reference tab and click on Table of Contents button from the Table of Contents group. Then click on Custom Table of Contents (see Figure 1.83).
5. Format the table of contents, if required.

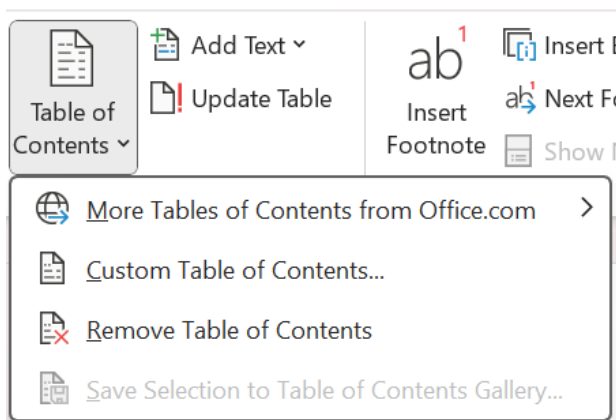


Figure 1.83

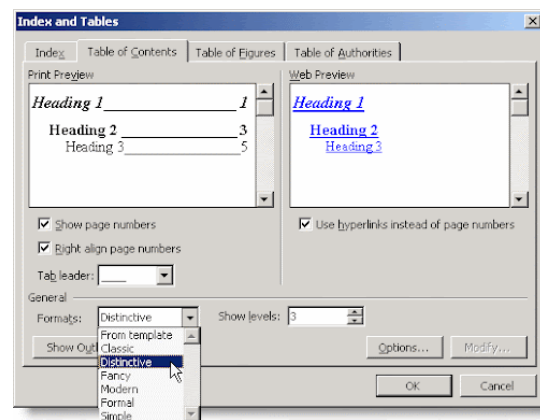


Figure 1.84: Five headings with a Heading 1 style and two headings (internal and portable) with a Heading 2 style

6. To update a table of contents that was created automatically from heading styles, click References > Update Table. You can choose to update page numbers only or select Update entire table to update the page numbers and the text (i.e. a change of heading text).

Let's now complete Activity 1.23 on how to apply styles and Tables of Contents within your document

Activity 1.23

1. Open an existing file or create a new MS Word file that consists of more than four pages. Top Tip: You can type =rand (40) to generate a four-page text document.
2. Save this document using the filename 'Styles Testing'. Click on Save or use the keyboard shortcut (Ctrl + S) to effect changes as you work through steps 3 to 8.

3. Apply a mixture of Heading 1, 2, and 3 styles to existing heading text. Insert some new headings across all the pages.
4. Insert page numbers in the document if this has not been done previously.
5. Generate a Table of Contents (ToC).
6. Insert two new pages and add some new heading text to these pages, random text is fine.
7. Apply styles to the new headings.
8. Update the ToC.

Share your document with your teacher and update your document with any feedback given to you.

Use the space below to reflect on Activity **1.23**. How did you find the activity? Include any notes that will help you to complete the task in the future.

Congratulations on completing the activity!

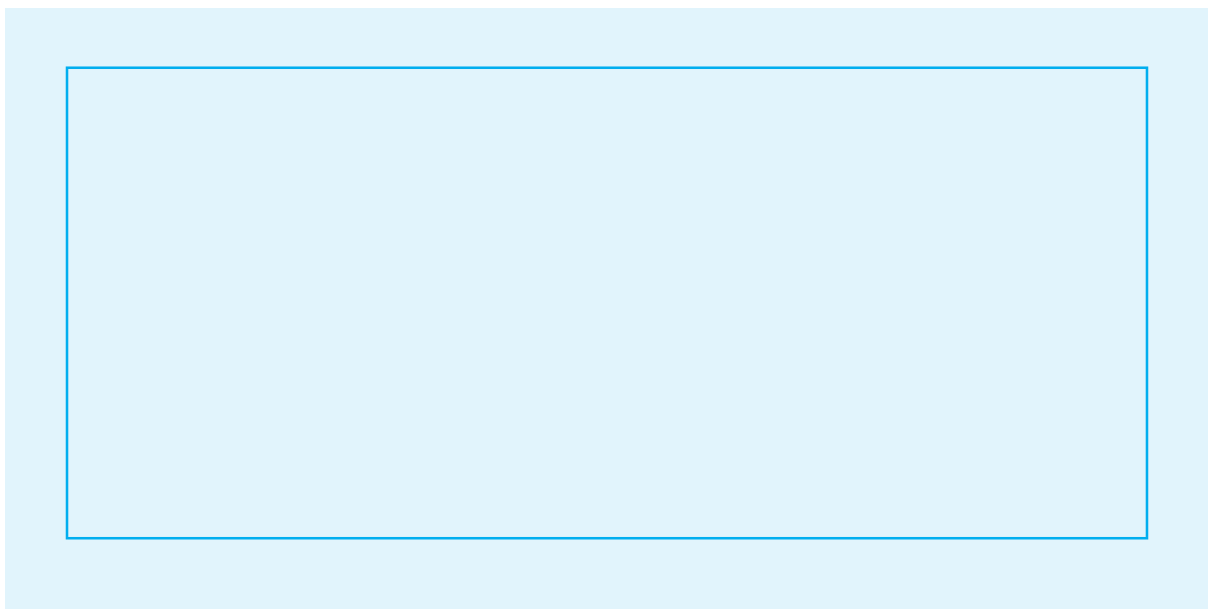
Now let's practice applying different styles in activity 1.24.

Activity 1.24

Steps:

1. Open an existing Word file from your ICT folder or a file given to you by your teacher.
2. Save this document using the filename 'Styles Set Testing'. Click on Save or use the keyboard shortcut (Ctrl + S) to effect changes as you work through steps 3 and 4.
3. Apply some different styles to your document text from the Styles drop-down menu (shown in Figure 1.81 above).
4. Go to the Design tab and try out different Style Sets (refer to Figure **1.82**).

Use the space below to reflect on Activity **1.24**. How did you find the activity? Include any notes that will help you to complete the task in the future.



Extended Reading

- Microsoft Office Step by step 2010 by Cox J., Lambert J., & Frye C. Microsoft Press.
- [Word: Formatting Text \(gcfglobal.org\)](http://gcfglobal.org)
- [How to Format a Word Document to Look Professional: 13 Steps \(wikihow.com\)](http://wikihow.com)
- Video on pagination and paragraphs. Click on the link below and watch.
https://youtu.be/pW4AamU0vGk?si=Wjr1torTjh-cy_Qx

WHAT IS A PRESENTATION SOFTWARE?

Welcome learner! Today, you will discover how you can use presentation software to present information, normally in the form of a slideshow. This will help you to present your assignments to your colleagues and later use such skills in your tertiary education as well as in the field of work in your future life. Presentation software are used by a number of professionals to present facts at meetings, workshops, classroom, laboratories. Professionals such as teachers, doctors, engineers, professors and others use this presentation software. Microsoft Office PowerPoint would be used in this section and several of its features would be examined. Many of the tools in PowerPoint match those in Word and work in the same way. The version of PowerPoint you use may have slightly different features from other versions, but they have a lot in common.

Establishing PowerPoint Version

It is very prudent to know the version of Microsoft Office you are using. Let's verify the version being run on your computer. Just follow the steps below:

Create a new blank presentation or open an existing PowerPoint presentation.

Choose *File* from the top left corner, and then click either *Account* or *Help* on the left navigation bar. You will see your Office version and information under Product information, on the right side of the window

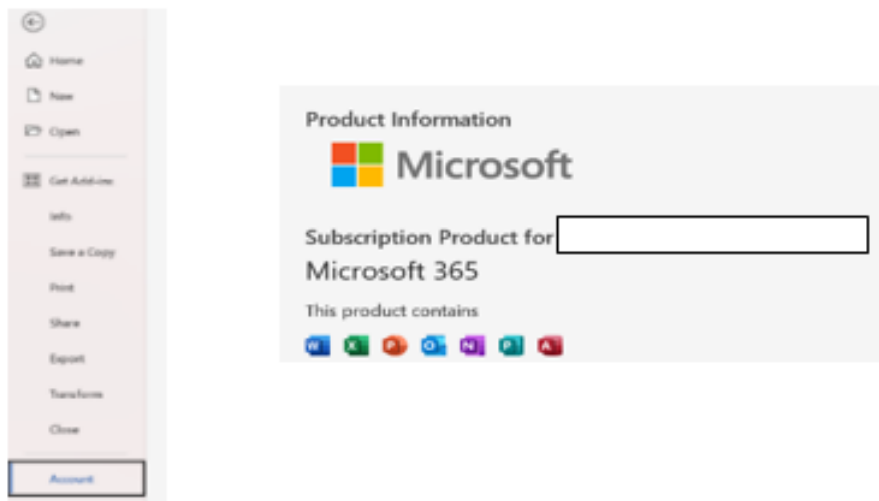


Figure 1.85: Checking PowerPoint version

Parts of the PowerPoint Window

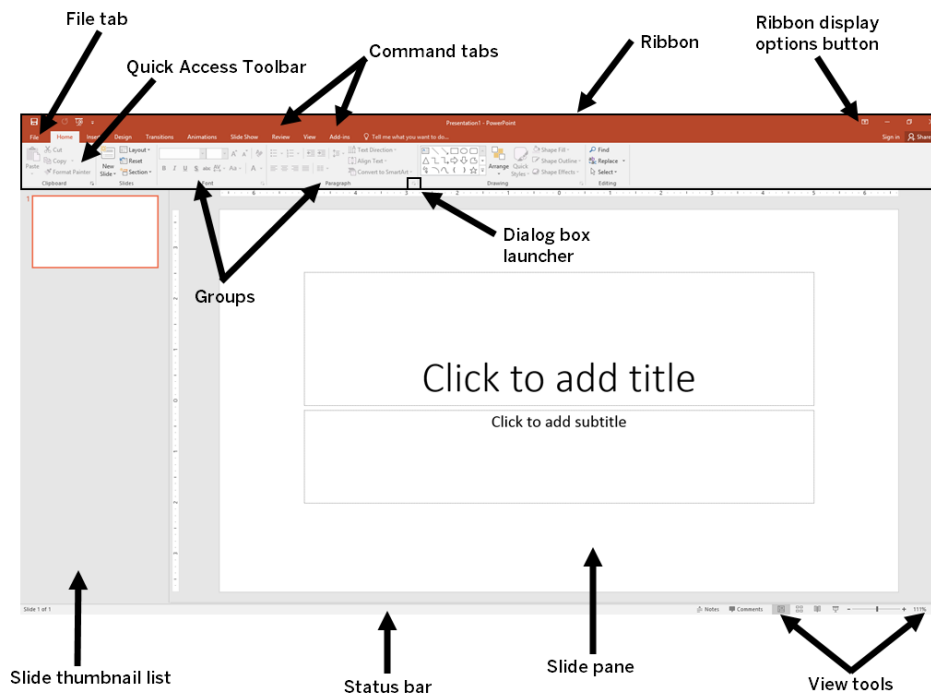


Figure 1.86: PowerPoint Window

Being familiar with the names of the various parts of the PowerPoint window and their function(s) is very useful and will be necessary for you to know as they will be mentioned in the guide instructions in this section. [Pop up]

Features and functions of MS PowerPoint window

Title bar: Displays the document name followed by a program name
Quick Access toolbar: Contains buttons for commonly used commands.
Tabs: Contain groups of commands organised by function
Ribbon: Contains buttons and options for the selected tab
Slide pane: Displays the current slide
Slides/Outline pane/slide thumbnail list: Shows a thumbnail or an outline of the slides
Status bar: Displays slide position, design, and other information
Scroll bars: Allow you to navigate through the slides
Slide title placeholder: Title of the slide is typed here.

Table 1.5

As illustrated in the table above, the PowerPoint window has similar features and layout to the Word window.

Most of the features of different versions of PowerPoint will match or be similar, but there may be some slight differences.

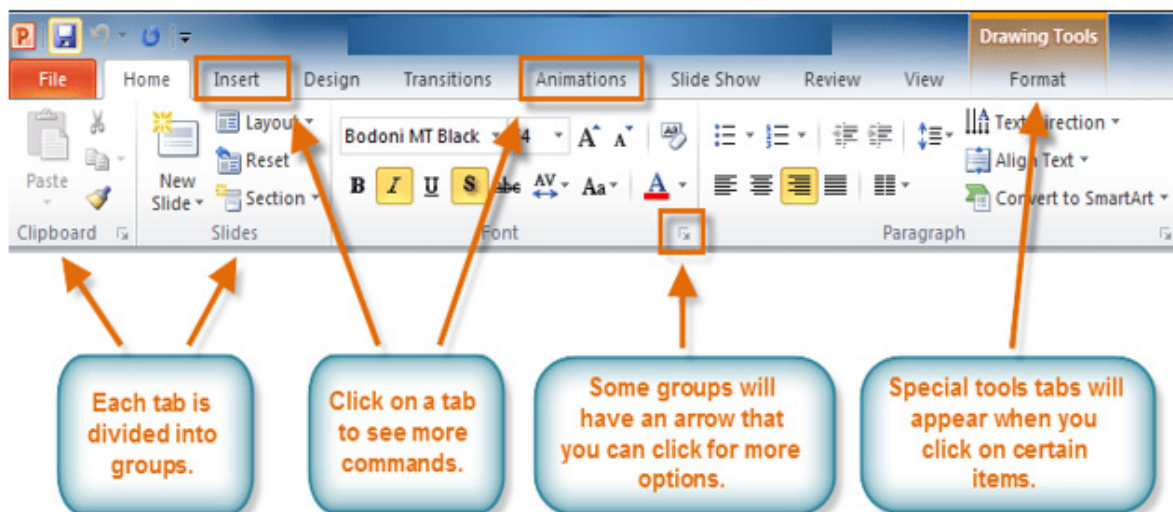
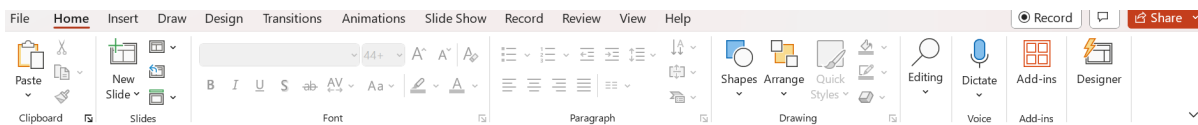


Figure 1.87: PowerPoint 2010 Home Ribbon

Basic file handling Guidance

A. How to launch Microsoft PowerPoint, create and save a new presentation

Now that you are familiar with the parts of Microsoft PowerPoint window, let's start with how to launch the application. [Pop up]

Follow the steps below to launch MS PowerPoint, create and save a new presentation.

1. Click on the *Start* icon (☰). It will be located in the bottom-middle or bottom-left corner of your screen.
2. Type *PowerPoint* in the search bar and click on the Microsoft PowerPoint app that appears in the search results
3. Click *Blank presentation* to open a new blank presentation window as shown in Figure 1.88

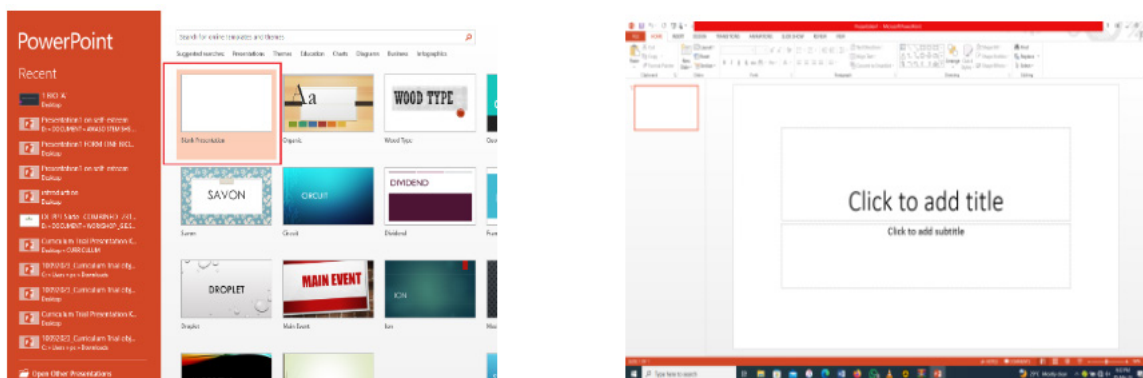


Figure 1.88

4. Click on *Save As* command (or *Save a Copy* if using PowerPoint 365)
5. Make necessary changes in the *Save As* dialogue box.
6. Click *Save*.
7. Add content to the title and subtitle in the slide pane by first clicking on the placeholders



Figure 1.89 Default first slide type

8. Add more slides if required (see instruction set B).
9. Click on *Save* regularly to update the content of the last stored file.
10. Click on the X in the top right-hand corner of the PowerPoint window or select *File > Close*. You may be prompted to save again at this point.

Note: Use *Save As* when saving a document for the first time. It is good practise to save the blank presentation using an appropriate file name and folder before you start entering content. Use *File > New* when starting a new presentation from within PowerPoint.

B. How to insert a new slide

Sometimes you may omit very important information that is supposed to be in the middle of your presentation for which you would like to add. Let us look at how that is done. [Pop up]

Follow the steps below to insert a new slide

1. Select the slide you want your new slide to follow.
2. Select *Home > New Slide* – see Figure 1.90

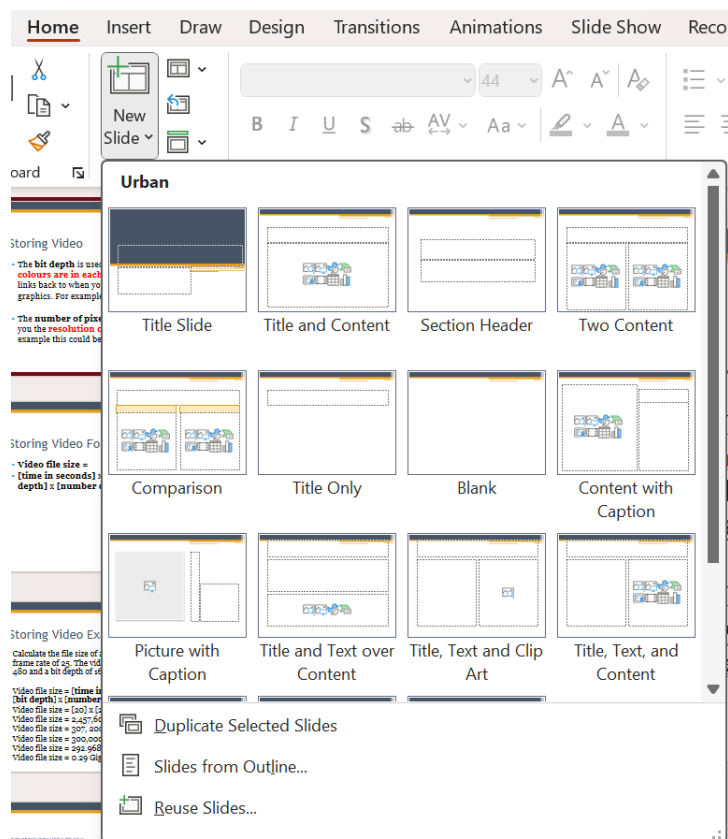
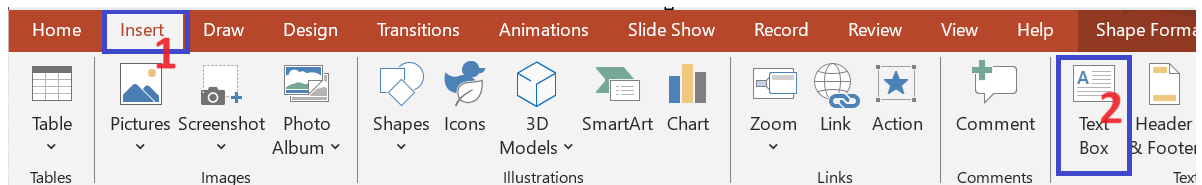
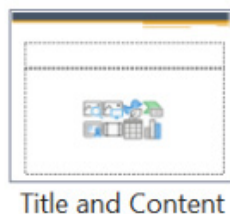


Figure 1.90: New Slide pull-down menu

3. Select a slide layout.
4. If *Blank* is selected, the user will have to insert a textbox to enter text.



- Click on the placeholder and enter the content.



This is the slide layout you will need for most of the tasks in this material:

Activity 1.25

Now that you have gone through how to create and save a new presentation, insert a new slide, let's apply those concepts to create a sample PowerPoint presentation and save it using the file name "Myself", title- "All About Me" and your own name as a subtitle. Use the tools from the font group (Home tab) to format the entered text as you wish and save your updated document.

Steps:

- Launch MS PowerPoint and select **Blank Presentation**
- Click on **File** and choose **Save As** to save it using the file name 'Myself'
- Add the text 'All About Me' as the title and your own name as the subtitle.
- Select the title by clicking at the beginning of the title, holding and dragging across the phrase 'All About Me'.
- Click on the Home tab
- Under the Font groupings, choose **ALGERIAN** as the font style, font size 20, font colour **Dark Blue** and click the letter **B** to bolden it.
- Select the subtitle for formatting.
- Format the subtitle with the following: font style – Times New Roman, font size – 16', colour – Dark Red and in Italics.
- Save your updated document by clicking on file and select **Save** or using the keyboard shortcut (Ctrl + S)

I hope you were able to create your first presentation? If no, go through the steps to create a presentation again and try the activity one more time. Take a colleague through **activity 1.25**.

C. How to delete a single slide

After you are done with your presentation, you may sometimes realise that some slides contain information that you feel like taking out from your presentation. Let us see how a slide can be deleted. [Pop up]


Follow the steps below

1. Right-click the slide in the thumbnail panel/list on the left.
2. Select *Delete Slide*.

D. How to open an existing slideshow for editing

Now that you are able to create your own presentation, you will sometimes have to open a presentation that was already created by you or someone else to make some changes to it. Let us look at how to open and edit an already existing presentation. [Pop up]

Follow the steps below

1. Click on the File Explorer icon. [
2. Go to the folder location where your file is stored.
3. Open the document you wish to edit by double-clicking on it.

From within PowerPoint, the steps would be:

1. Click the *File* tab.
2. Click *Open*. The Open screen appears, select/browse a location, and select the file you want to open.

E. How to print from PowerPoint

Let us look at how to print from a PowerPoint. [pop up]

Follow the steps below

1. Select *File > Print*.
2. To preview each slide, select the forward and backward arrows at the bottom of the page.



If the text is too small to read, enlarge using the zoom slider at the bottom of the page.

- Choose the number of copies, and other options you want. Check that the correct printer is selected and online. *Printer properties* will give you additional options. Select the *Print* button.

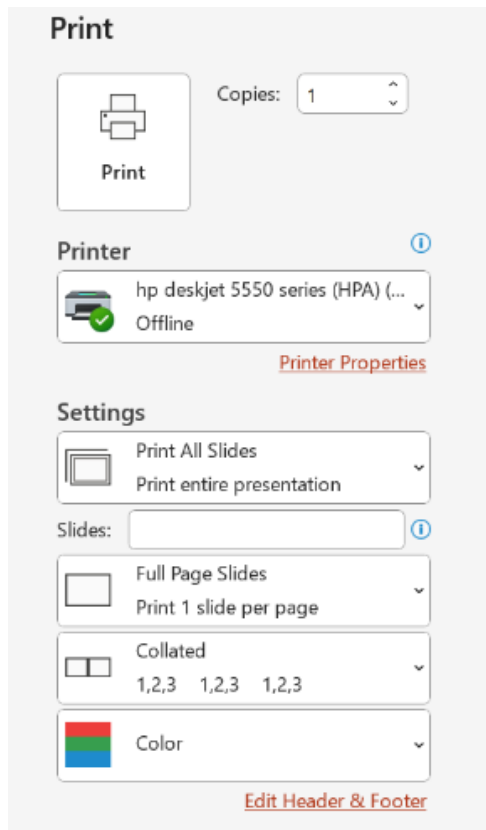


Figure 1.91: Print dialogue box

F. How to play a PowerPoint slideshow

After you have finished organising your presentation slides, there is a better way to present your beautiful designs and information to your audience automatically or by the click of a mouse button. It is called slideshow. [Pop up]

Steps to play a PowerPoint slideshow

- On the *Slide Show* tab in the *Start Slide Show* group, select *From Beginning* as shown in Figure 1.92

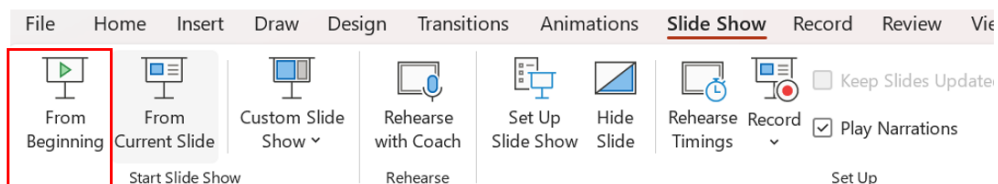


Figure 1.92

- Click on the mouse or press *N* on the keyboard to move to the next slide.

Activity 1.26

In this activity below (activity **1.26**), you are going to apply the skills you have acquired on how to delete a slide, open an existing slideshow for editing and how to print from PowerPoint.

Open the file you saved in activity 1 and insert a title and content slide with your title “My Family” and the content containing details about your family. You are required to add at least four slides about yourself with the titles: “My Favourite Things”, “My School” and “My Hope for the Future.” Try to add additional transitions and animations to your slideshow. Save your updated file.

Steps:

1. Open the file saved in Activity **1.25** (Myself.pptx).
2. Click on **Home** tab, select **New Slide** and choose **Title and Content** slide
3. Enter ‘My Family’ as the title and enter some details about your family in the content area. (Hint for content; Name of parents and siblings, family size, country of origin, favourite meals, hometown and so on.)
4. Add at least four additional slides about yourself, leaving room for pictures that you will be adding later. Three of these titles should be:
 - My Favourite Things
 - My School
 - My Hopes for The Future
5. Format your title texts to make it more visually appealing using the following: font style – Broadway, colour – Dark Blue and size 20points.

Click on the **Slide Show** tab and select **From Beginning** in the **Start Slide Show group** (refer to figure 1.92)

How to apply slide transitions

1. Click on your first slide to select it
2. Click on the **Transitions** tab and select the various transitions to see their effects.
3. Select the desire transition and click **Apply to All** command.

How to apply animations

1. Select or just click on the title of the first slide
2. Click the **Animations** tab and choose the various kinds of animations under that tab to see their effects on the text. Apply the same actions to the subtitle.

3. Copy your slideshow for a presentation in the ICT lab or classroom.
Prepare to explain to your colleagues how you did certain things.

Take Note

A transition effect determines how one slide changes to the next during a presentation. Transitions enhance the flow from one slide to another and make the presentation smoother or more visually engaging. For instance, A slide may fade, dissolve, or swipe from one slide to the next.

Animation Effect: It is applied to individual elements within a slide (such as text, images, or shapes) and determines how objects appear, move, or disappear within the slide. Animations are used to control the pacing of information or to draw attention to specific content. For instance, Text may fly in from the left, an image may zoom in, or a shape may bounce.

4. Save your updated file.

G. How to apply a design template

Microsoft PowerPoint has some designs for you to choose which can be applied to a slide or a group of slides. Of course, these designs are very beautiful and will make your presentations attractive. Let us now try to apply some of the designs to our presentation. [Pop up]

[A template is a pattern or blueprint of a slide or group of slides].

Follow the steps below

1. Click the *Design* tab on the ribbon.
2. Click the design you want from the Themes group – see Figure 1.93.

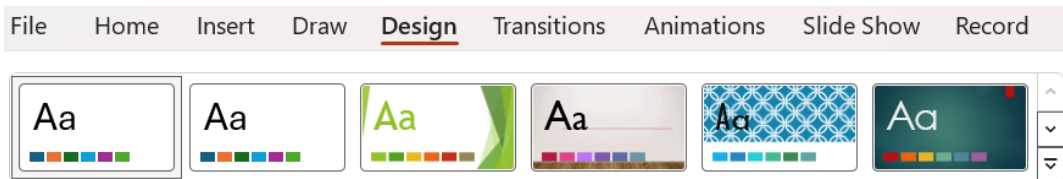


Figure 1.93

The design will be applied to the presentation.

Inserting Graphics Guidance

H. How to add basic shapes to a slide

Sometimes, you would like to add some shapes to your presentation to add more meanings to your work. Shapes such as; star, diamond, triangle, rectangle, arrows and many more are available for you to choose and draw for your work. Let's see how shapes are added to a slide. [Pop up]

Follow the steps below

1. Go to the slides pane in the PowerPoint window
2. On the *Insert* Tab under the *Illustrations* group, click on *shapes* and pick a shape
3. Drag the cursor using the mouse to enlarge the shape
4. Select the shape and use the tools from the *shape format* menu to format its appearance as you wish.

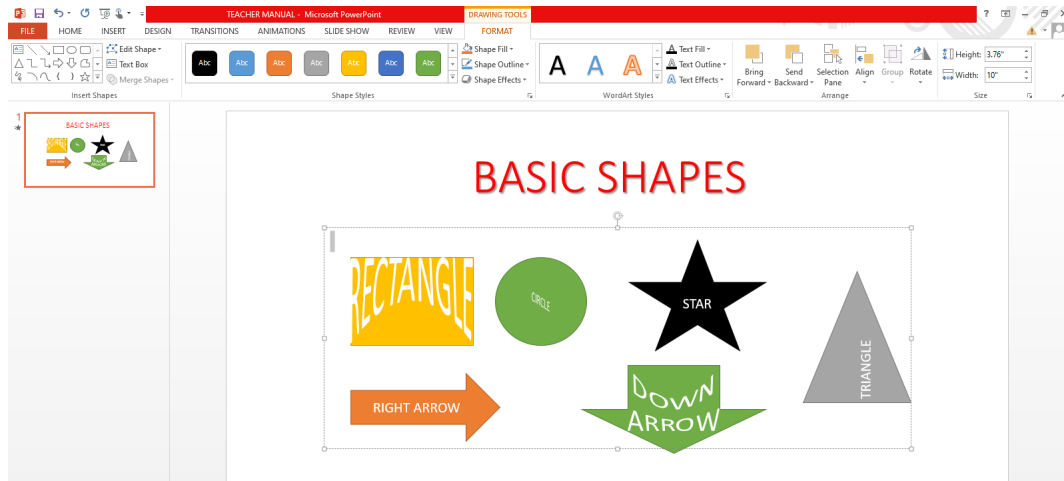


Figure 1.94 Inserting shapes

Activity 1.27

Having studied how to apply design templates and inserting shapes in PowerPoint presentation, let us try our hands on the activity below; in this activity (activity 1.27) you will practice how to apply design templates and insert shapes into a PowerPoint presentation.

Steps:

1. Open *Myself.pptx*.
2. Click the **Design** tab on the ribbon
3. Click the design you want from the **Themes** group.

Adding shapes

1. Select any slide and click in the content area.
2. Click the **Insert** tab.
3. Click on shapes and pick a shape under **Illustrations** group.
4. Drag the cursor using the mouse to enlarge the shape to your desired size.

5. Select the shape and click the **Format** tab, choose any shape style under the **Shape Styles** group.
6. Click **Shape Fill** to choose a colour for the entire shape.
7. Click on **Shape Outline** to change the colour of edges of the shape.
8. Click the **Shape Effects** to add special effects to the shape.

Save your updated slideshow.

I. How to add pictures to a slide

Sometimes, you would like to use a picture on your computer, online, flash drive or even a mobile phone in your presentation. Are you wondering how to do it? Don't worry. Let us start [Pop up]

Steps:

On the *Insert* tab under the *Image* group, click on Pictures – see Figure 1.95

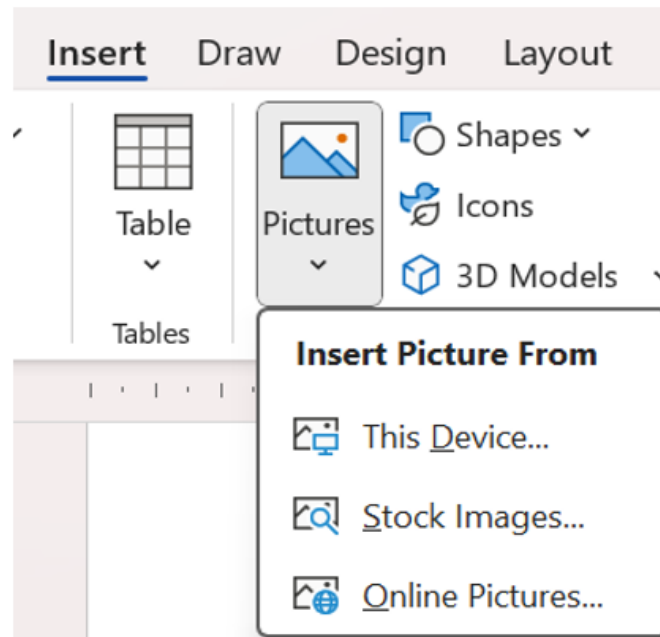


Figure 1.95

1. Then do one of the following:
 - Click *This Device* for a picture on your computer.
 - Click *Stock Images* for high quality images or backgrounds.
 - Click *Online Pictures* for a picture on the web.
2. Select the picture you want, and then click *Insert*. Your picture will be inserted – see Figure 1.96.
3. Use the tools in the *Picture Format* tab to format and edit the picture.

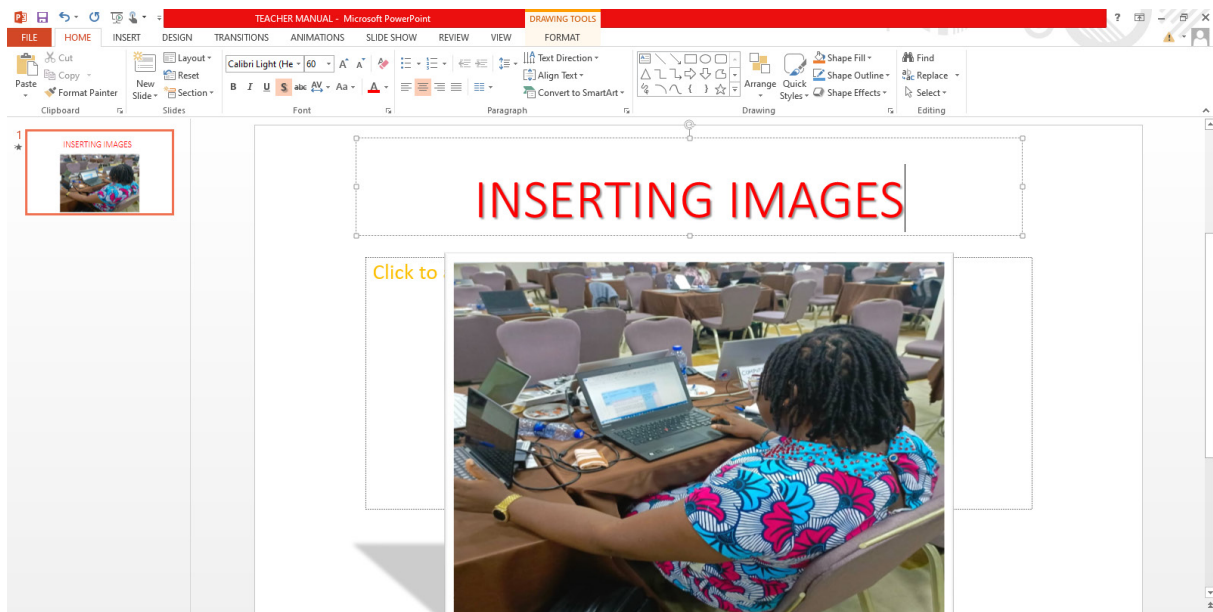


Figure 1.96: A slide with a title and an inserted picture

Activity 1.28

After going through how to insert pictures in the slide, let us practice this activity. In this activity you going to add an image (*the school logo*) to the first slide of your PowerPoint presentation.

Hint: Copy the school logo from your teacher or download it.

Steps:

1. Open Myself.pptx.
2. Select a slide from the slide pane
3. Click the **Insert** tab and click on **Pictures** under the **Image group**
4. Choose any of the following depending on the location of your pictures.
 - Click **This Device** for a picture on your computer.
 - Click **Stock Images** for high quality images or backgrounds.
 - Click **Online Pictures** for a picture on the web.
5. Select the picture you want and click Insert.

Formatting a Picture

1. Select the picture and click the **Format** tab
2. Under the **Adjust** group,
 - click on **Colour** to change your picture's colour to your choice.
 - Click on **Artistic Effects** to add special effects to you picture

- Click on **Compress picture** to compress your picture
- Click on **Change Picture** to change your picture

Save your updated file.

Activity 1.29

Project work

Conduct research on the benefits of AI-powered tools such as ChatGPT for creating presentations. Compile a list of links to useful websites and online videos on this topic.

Extended Reading

- **How to insert video in MS PowerPoint**
https://youtu.be/KGaUXc1ex9k?si=_CJBGIQXLZ_wXJB8
- How to make a PowerPoint presentation using ChatGPT
<https://youtube.com/shorts/k6ejsuhdf-A?si=4wR-PBziU6-ITtNM>

REVIEW QUESTIONS 1.1

1. In recent times, people use a lot of electronic devices to help in performing daily activities. Give three examples of electronic devices and what they're used for.
2. Imagine you walk into your school's ICT lab and the teacher asks you to show them to explain what external hardware is and to give examples. What would you say and what would you point to?
3. Upon entering your classroom on Monday morning, you witness a hot debate between your two classmates where one of them claims a touch screen is an input device, but the other says it's an output device. Who is right? What will you say to settle the debate?
4. USB drives, hard disks, and CDs are all examples of a particular classification of computer hardware. What is it and what is meant by that classification?
5. You are sending emails using a desktop computer. How do the CPU, RAM, and NIC enable you to do this?
6. How would you define software?
7. How does system software differ from application software?
8. How would you summarise the role of an OS in a computer system?

ANSWERS TO REVIEW QUESTIONS 1.1

1. Possible answers;
 - i. Mobile phone; For communication
 - ii. Digital camera; For taking of photos or images
 - iii. Digital watch; For checking time and communication. Etc.
2. External hardware, a.k.a a peripheral, is any physical device or component which is connected to the computer but isn't inside the case. You could point to a keyboard, mouse, monitor, printer (non-exhaustive list).
3. They're both right! An input device is any hardware device which is used to enter data into a computer for processing. A touch screen meets this definition because you can use it to 'click'/tap on the screen and control the phone or computer. On the other hand, an output device is a hardware device that receives information from a computer and presents it in a human understandable form. A touch screen meets this definition too because it displays the state of the computer to the user. Therefore, a touch screen is an input device and an output device at the same time.
4. A computer storage device is a device that stores data and information.
5.
 - i. CPU: It processes and executes the email software, and any other software needed for the task (e.g. the operating system)
 - ii. RAM: It provides internal working memory for the email software and operating system. When you type out your email, each letter must be stored in RAM before you send the finished email.
 - iii. NIC: It is the hardware that enables a computer to connect to a network. When you send your email, it will go through the NIC to the Internet.
6. Software can be defined as a set of programs, procedures, rules and possibly the associated documentation concerned with the operation of processing system.
7. System software is focused on the managing the computer system itself (e.g. OS, device driver) whereas application software is designed to accomplish a specific task which is relevant to the user (e.g. Word processor, accounting software).
8. 'Operating system' is a very appropriate name: it manages the operations of the computer system, making it so the user software (and user) doesn't have to worry about the nitty-gritty details of the hardware or the other software running at the same time.

REVIEW QUESTIONS 1.2

1. What are some examples of word processing software?
2. What is the function of the 'ribbon' in an MS Word window?
3. What is the keyboard shortcut for undoing the last operation when editing a Word document?
4. What does a red squiggly underline () indicate in a word document?
5. A document consists of three paragraphs. Which of the following operations could be used to move the first paragraph to the end of the document?
 - a. Move and Paste
 - b. Copy and Paste
 - c. Cut and Paste
6. Explain why it's important to save regularly when word processing a document.
7. Explain how using copy and paste can save time when creating a Word document.
8. Describe one tool in the Review tab in Word that you have used in a lesson and what you used it for.

ANSWERS TO REVIEW QUESTIONS 1.2

1. Some popular word processing software include; Microsoft Word, Google Docs, Pages, LibreOffice Writer
2. The ribbon is a broad bar that organises commands into groups. The commands are placed under tabs, including Home, Insert, Layout, References, mailings, Review and View tabs.
3. Ctrl + Z (undo action)
4. Red underlines are for spelling mistakes.
5. C (Cut and Paste). 'Move and Paste' isn't an operation in MS Word, and 'Copy and Paste,' wouldn't move the first paragraph, it would duplicate it.
6. If Word crashes or your computer turns off unexpectedly, if you haven't saved recently, you might lose a lot of work. If you save regularly, you'd only ever lose a small amount of work.
7. Copy and paste help you avoid retyping words in a document. You can also copy text from other places (e.g. another Word document) and paste them into your document, which can save a lot of time you'd otherwise spend typing the words by hand. It will also be a more accurate copy because it's easy to make mistakes while typing, whereas Copy and Paste will duplicate the text exactly.
8. E.g. Spelling and Grammar check. It is a tool in MS Word used to check and correct misspelt words and grammatical errors in a document.

REVIEW QUESTIONS 1.3

1. Your friend asks you to help her format the heading of a permission letter to bold and underlined in size 12 Times New Roman font. What will you do to make these formatting changes?
2. Peter, your class captain, sent the notice below to the class Retype it in your own document and apply the necessary formatting to make it look the same as it is here:

NOTICE! NOTICE!! NOTICE!!!

Mr. Sulley will be conducting a class test on **Friday, 22nd November 2024**.

The test is going to be online based, so every student should get seated at the ICT lab by **1:00 PM at the latest**.

Use the keyboard shortcut Ctrl+H t to display the Find and Replace dialogue box
Type to type the text you want to find in Find What box |
Type the text you want to replace with in Replace With box

Figure 1.73

[NOTE: The font style of the heading is Algerian, font size 16. The rest of the text is size 12 Times New Roman.]

3. Araba typed the document shown Figure 1.xx and later changed the appearance of the text to what is shown in Figure 1.73. What formatting has been applied to Figure 1.73 to produce the result in Figure 1.74?

Use the keyboard shortcut Ctrl+H t to display the Find and Replace dialogue box
Type to type the text you want to find in Find What box
Type the text you want to replace with in Replace With box

Figure 1.74

4. Selorm wrote an essay with the title “A Brief History of Ghana”. Currently, her title looks the same as the rest of her essay, but she wants to make it look more appealing and prominent. Suggest at least three formatting changes she could make to it to achieve this result.
5. Why is it important to format documents?
6. Use Word to create the following table:

Mammals	Reptiles	Amphibians
Dogs	Snakes	Frogs
Elephants	Lizards	Toads
Lions	Tortoises	Salamanders

Table 1.5

7. What is a watermark and why would you want to use one?
8. Open the document with the table from question 7 and compare/contrast the tabular presentation with the horizontal list's presentation in Figure 1.75 in terms of how easy it is to read.

Mammals: Dogs, Elephants, Lions

Reptiles: Snakes, Lizards, Tortoises

Amphibians: Frogs, Toads, Salamanders

Figure 1.75

ANSWERS TO REVIEW QUESTIONS 1.3

1. Steps
 - i. Select the heading.
 - ii. Click on **B** under the Home tab in the Font groupings (or press *Ctrl + B*) to make the text bold.
 - iii. Click on U (or press *Ctrl + U*) to underline the text.
 - iv. Click on the down arrow for font and choose the “Times New Roman” font style
 - v. Click on the down arrow for font size and choose 12.
2. The text should look the same as what is shown in the question, including the font choices and use of bold, italics, super script, and underlining.
3. There was a change in the font colour. The font colour was changed from black to red.
4. Selorm could capitalise the title (or use small caps), make it bold, underline it, increase the font size, or centre-align it. A combination of these options would be sure to make the title stand out!

A BRIEF HISTORY OF GHANA

5. Adopting the right formatting practices leads to the production of professional looking documents that attract and catch the attention of the reader. Formatting can emphasise important details, making the document easier to read and more understandable for the reader.
6. On the Insert tab, go through the process to insert a table of three columns, four rows, and enter the given data. Don't forget to make the top row bold!

Mammals	Reptiles	Amphibians
Dogs	Snakes	Frogs
Elephants	Lizards	Toads
Lions	Tortoises	Salamanders

7. A watermark is a faint design put over the text of a document. They can protect content; indicate ownership, the status, or classification of a document; or provide branding.
8. Of course, Whether you prefer the table version, or the horizontal list is somewhat subjective. For example, the table lines the text up nicely, but it also takes up more space. And what if there were different numbers of animals in the different categories? For the horizontal list, this wouldn't be a problem, but for the table this would result in empty cells.

REVIEW QUESTIONS 1.4

1. Complete the sentence: *Text inserted in the bottom margin of every page of a document is called a _____.*
2. *Ctrl + Enter is the keyboard shortcut for*
 - a. a column break
 - b. a page break
 - c. a section break
3. What problem may arise when printing in Word if the document's page margins are too narrow (i.e. the text is very close to the edge of the page)?

ANSWERS TO THE REVIEW QUESTIONS 1.4

1. Footer.
2. B, a page break.
3. If the document's page margins are too narrow, portions of the content (text) may fall outside printable areas.

REVIEW QUESTIONS 1.5

1. Your ICT teacher has tasked you to work on a lengthy report with multiple sections and subsections. How would using Word styles for formatting headings benefit you in terms of consistency and document navigation?
2. Give an example of a picture bullet that is suitable to be used with a list of names of players in a football team.

3.

- a. Create a document that will generate the following table of contents:

Input devices	1
Output devices	1
Processing devices	2
Storage devices	2
Internal	2
portable	2

Note: No text needs be added to the pages, just the headings.

- b. b. Insert a new page (page 3) with the heading ‘Communication devices’
- c. c. Update the table of contents to show this new page and heading.
4. When a cook is writing down a recipe, they need to present the instructions in a clear and organised manner. State the type of list that is best suited to this situation. Justify your choice.
5. What type of page orientation would be best suited to a three-column brochure? Justify your choice of orientation.
6. Evaluate the effectiveness of using a word processor to create the following documents:
 - a. An English essay
 - b. A birthday Card
 - c. A 3-column brochure
 - d. A poster to advertise a school dance
 - c. A music quiz slideshow
7. Investigate the function of the following tool in Word (Design Tab):
Use your findings to explain the difference between a Word style set and a Word theme.
8. Since its inception in 1983, Microsoft Word has gone on to become one of the most popular office applications in the world. Research the history of Word and create a timeline showing its different versions and major functionality extensions over the past 40 + years.

ANSWERS TO REVIEW QUESTIONS 1.5

1.
 - i. Have consistent formatting across the document
 - ii. Provided a plan for efficient document navigation
 - iii. Consider the time-saving aspect and the ease of maintaining a cohesive look across the entire document.
2. A new picture bullet for a list of football players' names could be a small icon of a football.
3. Follow the procedures to execute the task.
4. A numbered list would be the most suitable.

The following are reasons for choosing numbered list:

- i. For Sequential Instructions
- ii. For Clarity
- iii. Ease of Reference
- iv. For proper organisation
- v. For readability

Overall, a numbered list offers a structured and instinctive format for presenting recipe instructions, ensuring clarity, coherence, and ease of use for the cook.

5. Landscape orientation is best suited to a three-column brochure because it provides ample horizontal space for three distinct columns, making the content easier to read and visually balanced.

Q6, Q7 and Q8

Your teacher will provide you feedback on your work.

REVIEW QUESTIONS 1.6

1. Your Social studies teacher gave you assignment on the topic “Culture and its elements”. You are supposed to present your work using Microsoft Office PowerPoint. Create a presentation using the details below.
 - i. The First slide should contain “Culture” as the title and the definition of culture as the subtitle.
 - ii. Add another slide with a title “Elements of culture “and list four elements of culture in the subtitle.
 - iii. Insert a slide between the first slide and the second with a title “Revision” and subtitle “End of work”
 - iv. Delete the recently inserted slide and save your work as “Social_Studies1”
2. A reputable company in your area called Mawuse Co Ltd asked you to prepare a presentation with the details below. Produce an attractive presentation using the information below:
 - a. Start a new blank presentation
 - b. Hint: Your first Slide should be the Title Slide
 - c. Use the name of the company (**Mawuse Co Ltd**) as the title.
 - d. Make the Font of the title Arial Black and size 88 points
 - e. Insert a second slide, this should be with a layout of Bulleted List
 - f. Type the Text as seen below;
 - g. Change the Font Colour of the list Blue.
 - h. Insert a third slide, this should be an Organization Chart. Include the following people in the chart:
 - i. Kofi Blay David, General Manager
 - ii. Mabel Nnuro, Head of Sales
 - iii. Trinity Gagbe, Assistant General Manager
 - iv. Charlotte Tu Serlom, Human Resources Manager
 - i. Add a fourth slide. The slide should contain the Table below:

New Products	Discontinued Products
Digital Camera	8mm Cameras
Ultra Slim Video Camera	8x Zoom Video Camera
25" Plasma TVs	25" Plasma TVs 21" Black and White TVs
DVD Recorders	Video Players
7.1 Dolby Surround Systems	2 channel stereo systems

- j.** Make the table headings **New Products** and **Discontinued Products** with a shadow effect and centred in the cell. Widen columns to fit Text as above.
- k.** The Fifth slide should be a Chart slide. Use the table below to generate a bar chart.

	January	February	March	April
TVs	22	26	73	34
DVDs	31	52	27	81
Wi-Fi equipment	46	45	46	62
Video Records	24	31	42	45

- l.** Change the colours of the chart so that the series of bars are red, yellow, pink, and green.
- m.** Add a light-coloured background to all slides in the presentation.
- n.** Add also Transition effects between slides and also different effects for some of the text in the presentation.
- o.** Reverse the order of the second and third slides
- p.** Insert an image on the first slide.
- q.** Save the presentation as Mawuse Co Ltd.

3. Project work

There is going to be an annual food fair in your locality so all the stake holders will be meeting as one of the activities towards this event. You are to prepare a presentation that will be played at the meeting. Use the details below:

- a.** The first slide is a Title Slide. Select the appropriate layout and enter the title:
Annual Food Fair.
- b.** Add the sub-title:
A Celebration of Eating
- c.** Insert a small, red circle at the bottom right of the title slide.

- d. Change the font colour for the whole title and sub-title to blue and apply a text shadow effect just to the words **Food** and **Fair**.
 - e. Insert a second slide to the presentation. Select a layout appropriate for a series of bullet points. Use text “**The Menu**” as the title. Enter the following text as the content placeholder:
 - i. Fufu with goat meat light soup
 - ii. Tubani and wasawasa
 - iii. Akple and okro soup
 - iv. Fried rice with chicken
 - f. Change the line spacing for these bullet points to 1.5 lines.
 - g. Increase the font size for the words **The Menu** in the title.
 - h. Add a footer with your name and the text: “**Food Fair**” so they both appear on every slide, and number all the slides. (Make sure the number is not obscured by the red circle on the title slide)
 - i. Add another slide and insert a video that contains some Ghanaian dishes. Save your presentation.
 - j. Save your presentation as Proudly Ghanaian.
4. A travel and tour company is organising a vacation trip for workers who will be interested to join. You have been tasked to prepare a presentation for this event given the details below:
 - a. The first slide is a Title Only Slide. Select the appropriate layout and enter the title:
Cook Family Cruises.
 - b. Add a small blue rectangle at the top left of this slide.
 - c. Change the font colour for the whole title to red and apply a text shadow effect just to the word **Cruises**.
 - d. Insert a second slide to the presentation, selecting a layout appropriate for a series of bullet points, and using the title: **Our Itinerary**. Enter the following text:
 - i. Akosombo Islands
 - ii. Mole National Park
 - ii. Nzulenzu Stilt Village
 - e. Change the line spacing for these bullet points to 2 lines. Increase the font size of the word **Itinerary** in the title. Add a footer with your name and the text: **Cruise Information** so they both appear on every slide, and number all the slides.

- f. Insert a third slide, to contain a pie chart. Use the title **Our Market Share**. Use the following data to produce a pie chart: Cook 54%; Kidi 28%; MzVee 12%; Lazy Bwoy 5%
- g. Embolden the text in the title of the third slide and change the font to Arial.
- h. Apply a different background to each slide in the presentation.
- i. On the third slide, insert an image suitable for the topic of holidays from an image library. Reduce the size of the image and place it where it will not interfere with text.
- j. Add a 4th slide containing nothing but the text: **Travel with us for less!!**
- k. Save the presentation as **holidays**.
- l. Print the presentation with 4 slides per page and close the presentation.

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