



DIGITAL LITERACY

TEACHER TRAINING MANUAL

September 2022

Acknowledgment

This Teacher Training Manual for Digital Literacy was developed through collaborative efforts of a team of staff from primary and secondary schools, Teacher Training Colleges (TTCs), University of Rwanda College of Education (URCE) and Rwanda Basic Education Board (REB). It was produced under the support of the World Bank through the Quality Basic Education for Human Capacity Project under the SPIU in REB.

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Successful integration of ICT in teaching and learning requires rethinking the role of teachers in planning and applying ICT to enhance and transform learning. We hope that this manual will help and facilitate teachers to gain digital literacy skills to use educational ICT devices, software and internet to collaborate, innovate, discover, use and create appropriate and relevant information.

Dr. MBARUSHIMANA Nelson

Director General

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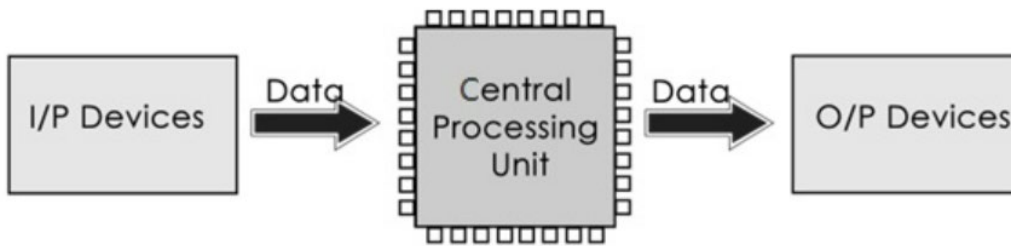
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1.1. General introduction to computer

1.1.1. Definition

A computer is an electronic device, operating under the control of instructions stored in its own memory that can accept data (input), process the data according to specified rules (Control Processing Unit), produce information (output), and store the information for future use (Internally or externally). Any kind of computer consists of **HARDWARE** (collection of physical elements that constitutes a computer system) **AND SOFTWARE** (set of instructions, data or programs used to operate computers and execute specific tasks).

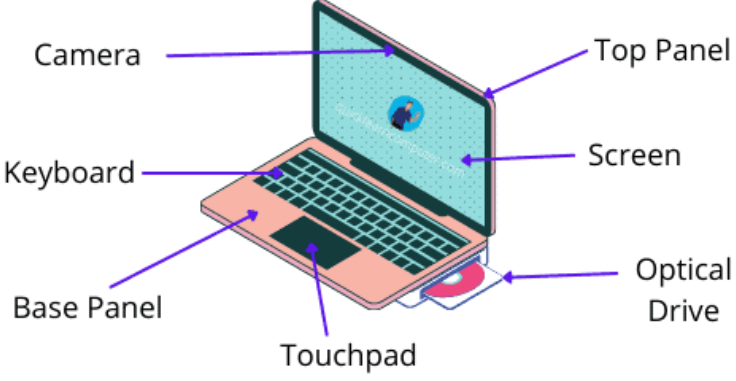

Computer systems consist of three components as shown in below image: **Central Processing Unit, input devices and Output devices**, which processes data and generates useful information that is displayed to the user through output devices.



1.1.2. Types of Computers

Computer types depend on data handling capabilities or the physical appearance. The table below shows the physical appearance of some of the different existing types of computer and size:

Type	Illustration
<p>1. Desktop Computer</p> <p>A computer designed to fit comfortably on top of a desk, typically with the monitor sitting on top of the computer</p>	

<p>2. Laptop</p> <p>A small, portable computer -- small enough that it can sit on your lap</p>	 <p>The diagram shows a laptop with several components labeled with purple arrows: Camera (pointing to the lens on the bezel), Top Panel (pointing to the upper part of the lid), Keyboard (pointing to the key area), Screen (pointing to the display area), Base Panel (pointing to the bottom part of the laptop body), Touchpad (pointing to the touch-sensitive area below the keyboard), and Optical Drive (pointing to the drive on the right side of the base).</p>
<p>3. Tablet / iPad</p> <p>A computer that is intermediate in size between a laptop computer and a smartphone.</p>	 <p>The image shows a tablet device with a black bezel. The screen displays a home screen with a grid of colorful application icons, including social media and utility apps. The background of the screen is a scenic landscape.</p>
<p>4. Smart phone</p> <p>A smartphone is a portable computer device that combines mobile telephone and computing functions into one unit</p>	

1.2. Hardware

Computer hardware is the physical components that a computer system requires to function. It encompasses everything with a circuit board that operates within a PC or laptop, including the motherboard, graphics card, CPU (Central Processing Unit), ventilation fans, webcam, power supply, and so on.



1.2.1 Computer peripherals

A peripheral or peripheral device is an auxiliary device used to put information into and get information out of a computer. Peripherals are commonly divided into three kinds: input devices, output devices, and storage devices

a) Input devices:

An input device is something you connect to a computer that sends information/data into the computer.

Examples of input devices

#	Device	Image	Details
1	Keyboard		It is used to enter characters and functions into the computer system by pressing buttons, or keys. It is the primary device used to enter text. A keyboard typically contains keys for individual letters, numbers, and special characters, as well as keys for specific functions.
2	Mouse		A mouse is a small hardware input device used by hand. It controls the movement of the cursor on the computer screen and allows users to move and select folders, text, files, and icons on a computer. Some are wired, others are connected without wire (wireless).

b) Output device

An output device is any piece of computer hardware equipment, which converts information into a human-perceptible form. The main computer output device is a **monitor** or screen, which displays computer information like video images and text.

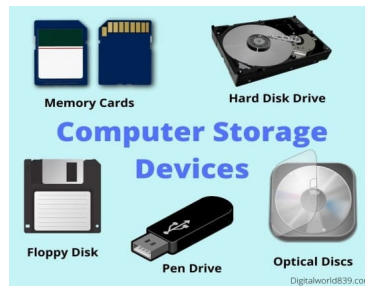


Other output devices will be highlighted into the list of peripherals.


c) Storage devices

Storage is a mechanism that enables a computer to retain data, either temporarily or permanently. Storage devices such as flash drives and hard disks are a fundamental component of most digital devices since they allow users to preserve all kinds of information such as videos, documents, pictures and raw data.

Examples:

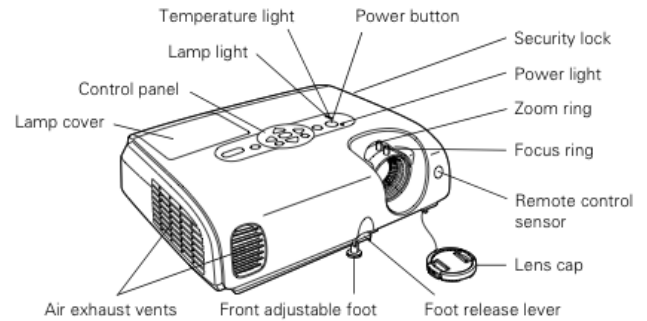


Additional examples of computer peripherals

#	Peripherals	Details
1	Scanner 	The scanner uses the pictures and pages of text as input. It scans the picture or a document. The scanned Picture or document is then converted into a digital format or file and is displayed on the screen as an output.
2	Printer	A printer is a device that accepts text and images output from a computer and transfers the information to paper.



3 Projector



A projector is an optical device that projects the computer content onto a surface, commonly a projection screen




4 Webcam



Inbuilt camera



Separate camera which can be added (or connected) to

5	<p>Speakers</p> 	<p>A computer speaker is an output hardware device that connects to a computer to generate sound.</p>
6	<p>USB Flash Drive</p> 	<p>A USB flash drive is a portable data storage device that includes flash memory with an integrated USB interface. It is typically removable, rewritable, and small. It is measured into Gigabits.</p> <p>The USB (Universal Serial Bus) port on the computer, is used also for Modems, Printer and other devices plugin.</p>
7	<p>Power cord</p> 	<p>Power cords are a vital part of any computer, whether it is a laptop or a desktop. The desktop needs the power cord to work. A laptop can run on batteries for a limited amount of time, but then needs the power cord for recharging.</p>

1.2.2 Computer ports

In computer hardware, a port serves as an interface between the computer and other computers or peripheral devices. In computer terms, a port generally refers to the part of a computing device available for connection to peripherals such as input and output devices.

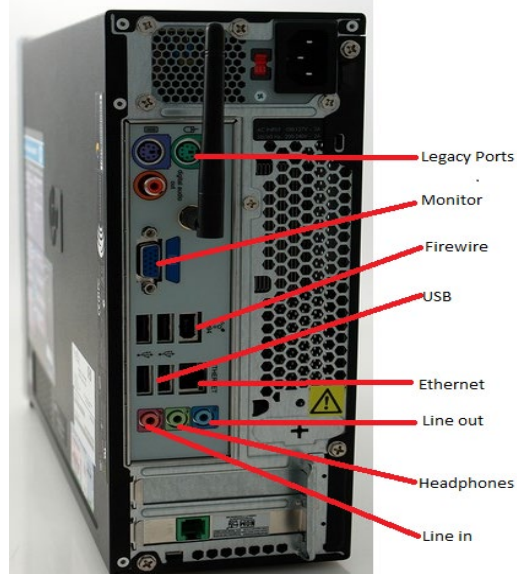
Desktop Computer ports

Legacy ports: For mouse and keyboard, but **for the new computers those ports are no longer used.**

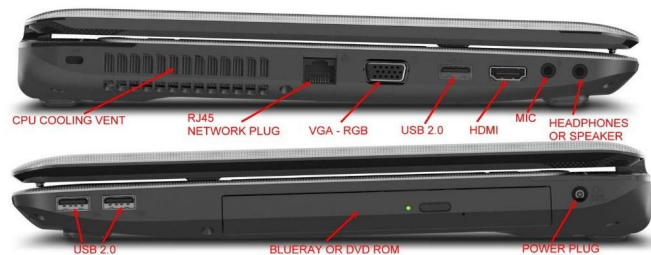
Monitor: to connect VGA cable for monitor/screen

Firewire: It can transfer a large amount of data at a very high speed

USB: For connecting flash disks and other devices with USB terminal



Laptop Computer ports



1.2.3. Identifying and addressing hardware issues

Examples of hardware issues

#	Hardware fault	Action
1	Keyboard Problems: stuck keys, broken keyboards, keyboards that will not connect to the computer or keyboards where the letters end up jumbled.	<ul style="list-style-type: none">- Unplug and plug it again- Report if to IT repair- Or purchase a new one
2	Mouse Problems: freezing on the screen, connection problems, failure to move or damage to the mouse. a wireless mouse that freezes might need a battery change, while a wired mouse that freezes will need repairs or replacement.	<ul style="list-style-type: none">- Unplug and plug in again- Restart the computer- For wireless mouse, try to change battery- Report to IT repair- Or purchase a new one
3	Power Cord Problems: Power cords are a vital part of any computer, whether it is a laptop or a desktop. The desktop needs the power cord to work. A laptop can run on batteries for a limited amount of time, but then needs the power cord for recharging. The cable may not charge the computer	<ul style="list-style-type: none">- Check along the entire length of the cord to ensure it is well plugged-in.- For Laptop adaptors, report to IT repair or replace the cord.

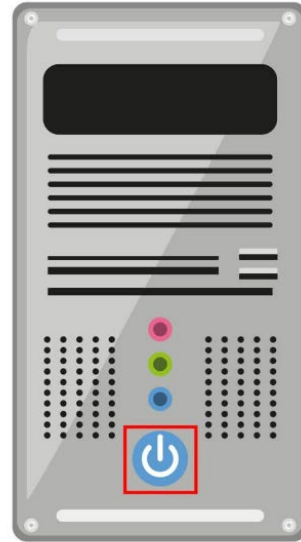
1.2.4. Start up and shut down a computer

a) Start a computer system/ Turn on your computer

Whether you want use a laptop or a desktop computer, you need to start the computer first. To do so, you will have to locate the switch button on your device and follow the steps below:



Laptop computer



Desktop computer

Steps to turn on your computer:

1. Locate the power button on the computer which may display the icon below:



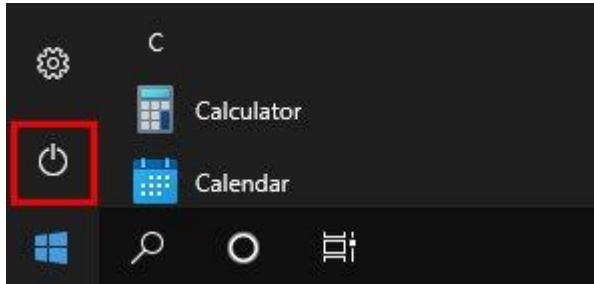
2. Press the power button once.
3. You should see the computer lights turn on.
4. The computer will now go through several processes to power on, these include several tests to ensure each part of the system is functioning correctly.
5. Once the initial startup processes have completed, and this may take a minute or two, you should now see a screen displayed with the date and time.

b) Shut down the computer

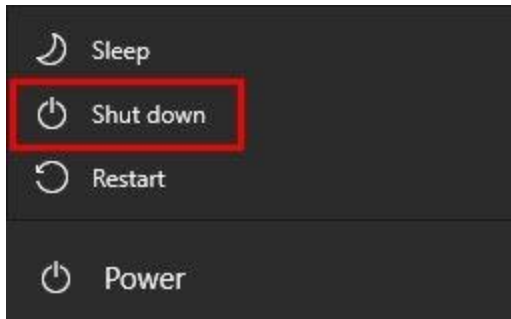
When you are done using the computer, it is a good practice to shut down your computer. This gives the computer system a break and allows all components to cool down completely. This will also save energy consumption.

To shut down the computer:

1. Click the Start menu
2. Click the Power icon



3. Choose Shut down



4. The computer will now shut down.

1.3. Software

Computer Software is a set of instructions, data or programs used to operate computers and execute specific tasks. Computer software are mainly divided into three types:

System software / Operating systems: is a type of computer program that is designed to run a computer's hardware and application programs. Example: Windows, mac OS, Android and iOS

Utility software: is a type of program that is designed to run in the background like security and optimization programs. Example: Antivirus

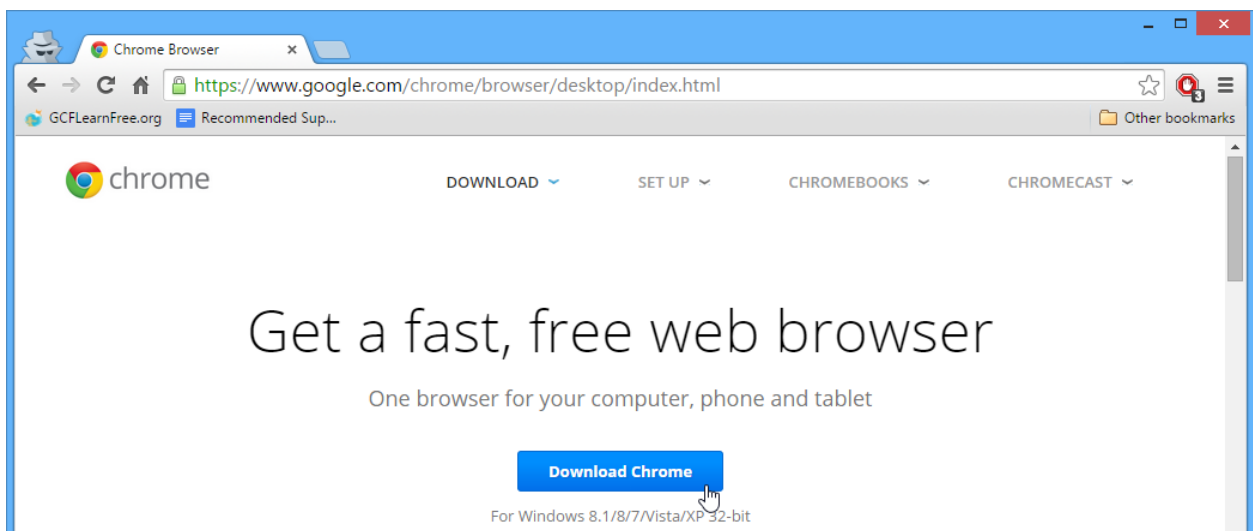
Application software: is a computer program designed to carry out a specific task typically to be used by end-users. Example: Microsoft products such as Office, PowerPoint, Word, Excel; Internet browsers like Chrome, Safari, and Firefox; and Music Application Software.

1.3.1. Application software installation

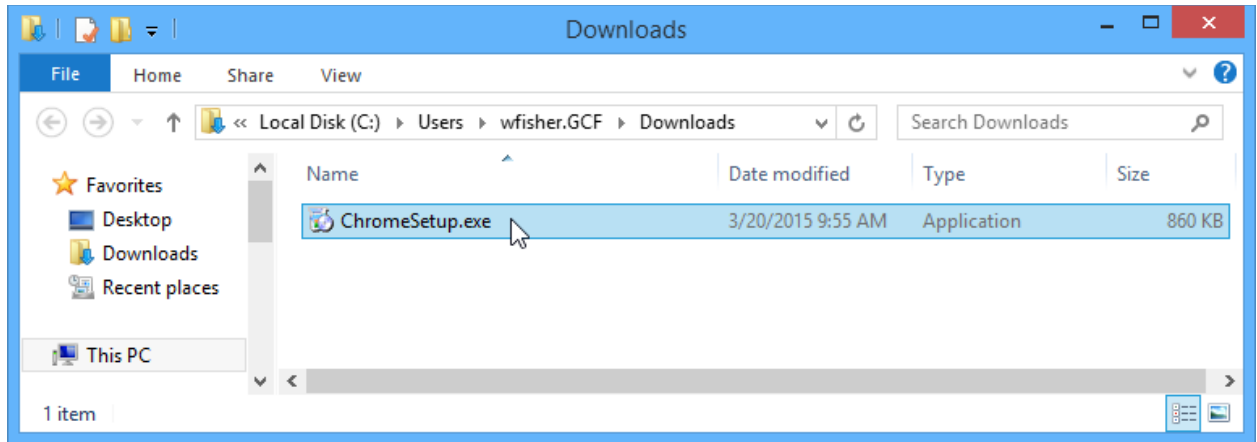
Today, the most common way to get new software is to **download it** from the Internet. Some are free applications others are commercial. For example, if you wanted to install the **Google Chrome** web browser, you can visit **this page** (<https://www.google.com/chrome/>) and click the Download button. Or if you want to download **VLC** for video player, visit **this page** (https://filehippo.com/download_vlc-media-player-64/) and click the Download button.

The installation file will be saved to your computer in “.exe” format. Pronounced **dot e-x-e**, this is the standard extension for installation files on Windows computers. You can follow the steps below to install an application from an .exe file.

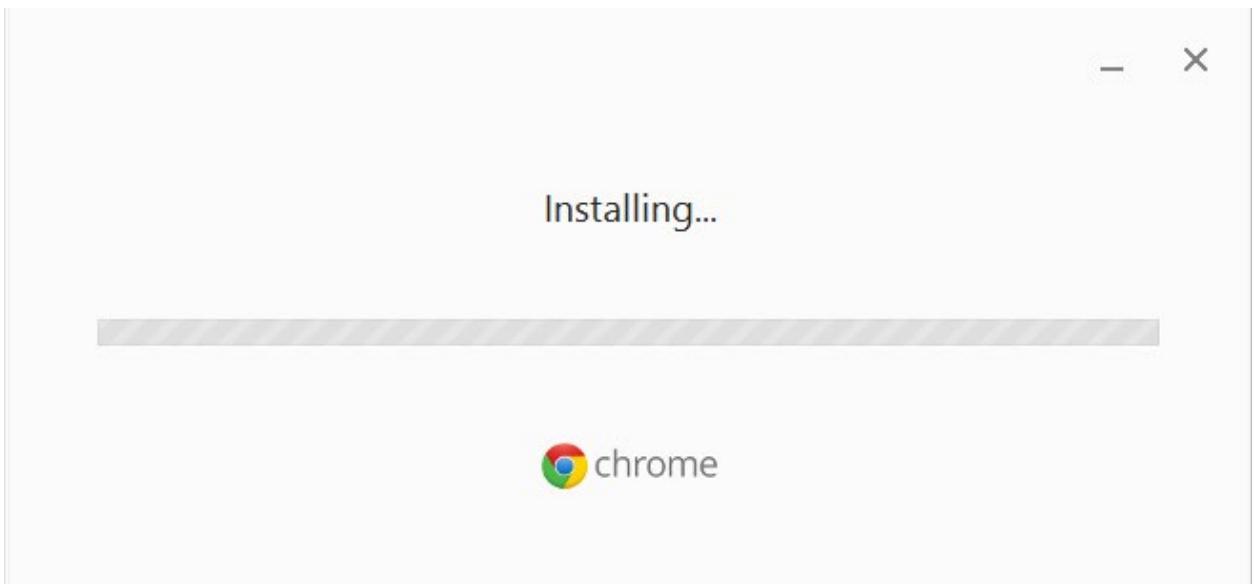
1. Locate and download an **.exe** file.



2. Locate and **double-click** the .exe file. (It will usually be in your **Downloads** folder.)



3. A dialog box will appear. Follow the instructions to install the software.



4. The software will be installed. You can now open the application from the **Start menu** (Windows 7) or the **Start Screen** (Windows 8)

1.3.2. Protecting computer with password

If you are using a PC or laptop for your own needs only, it is always advisable to password protect it. Each person has personal files, including documents, videos, photos, banking credentials, etc. that should not be viewed or used by other people. Therefore, experts highly recommend password protecting the PC.

For a computer with Windows 10, here are the steps to password protect Local User Account:

1. Search for **Control Panel** and click on **Change account type**


Adjust your computer's settings

View by: Cate

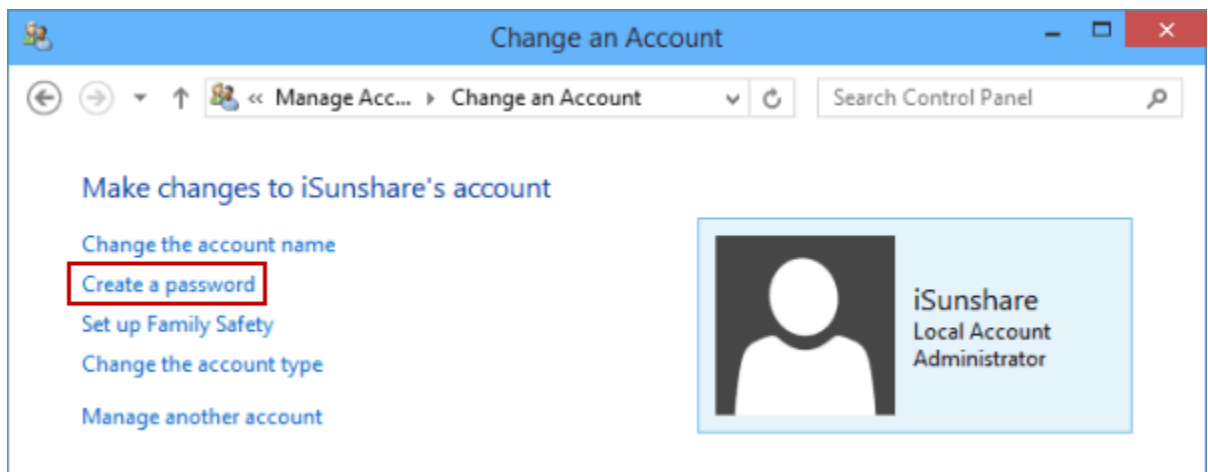
- System and Security**
Review your computer's status
Save backup copies of your files with File History
Backup and Restore (Windows 7)
- Network and Internet**
View network status and tasks
- Hardware and Sound**
View devices and printers
Add a device
Adjust commonly used mobility settings
- Programs**
Uninstall a program
- User Accounts**
Change account type
- Appearance and Personalization**
- Clock and Region**
Change date, time, or number formats
- Ease of Access**
Let Windows suggest settings
Optimize visual display

1. Select a user account.

Choose the user you would like to change




2. Choose Create a password.



3. Enter a new password, re-enter it, type password hint and click Create password.

Create a password for iSunshare's account

 **iSunshare**
Local Account
Administrator

You are creating a password for iSunshare.

If you do this, iSunshare will lose all EFS-encrypted files, personal certificates and stored passwords for Web sites or network resources.

If the password contains capital letters, they must be typed the same way every time.

The password hint will be visible to everyone who uses this computer.

1.4 Practices

Activity 1

Question 1: Can you tell the difference between a simple calculator and a computer?

Question 2: Explain the difference between a simple calculator and a computer?

Question 3: Name the computer components illustrated by the numbers

Question 4: List the usage of computer in teaching activities

Question 5: *The most frequently used output device is the:*

a. Scanner, b. Monitor, c. Mouse, d. Digital Camera

Hint: *b*

Question 6: *Devices such the keyboard, scanner and microphones are known as:*

a. Input, b. Output, c. Processing, d. Storage

Hint: *a*

Question 7: *Which of the following is not an output device?*

a. Speakers, b. Monitors, c. Scanner, d. Disk drive

Hint: *c*

Question 8: *What is the difference between operating system with an application software?*

Question 9: *List 4 names of Desktop Operating systems.*

Question 10: *Investigate your environment and find out which operating systems are being used by people surrounding you. If possible, discuss and share the experiences of various users who are using different Operating Systems.*

MODULE 2: CREATE DIGITAL CONTENT WITH WORD PROCESSING

Word Processing commonly known as MS Word in windows is one of the programs of MS Office which aims to help computer users in creating text documents. MS Office is produced in several versions targeted towards different end-users and computing environments.

This module of word processing aims at helping in service primary teachers to digitalize their pedagogical documents.

This module will be focused on:

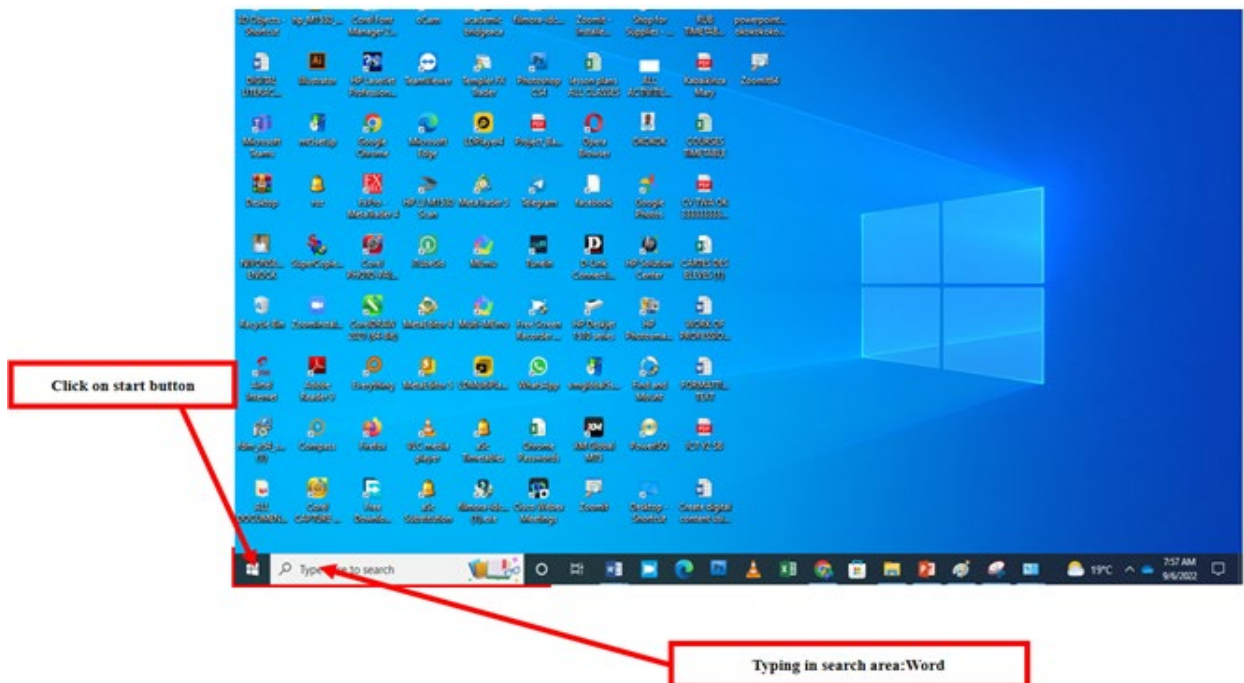
- Exploring Microsoft Word
- Formatting text
- Practices

2.1. Exploring Microsoft word

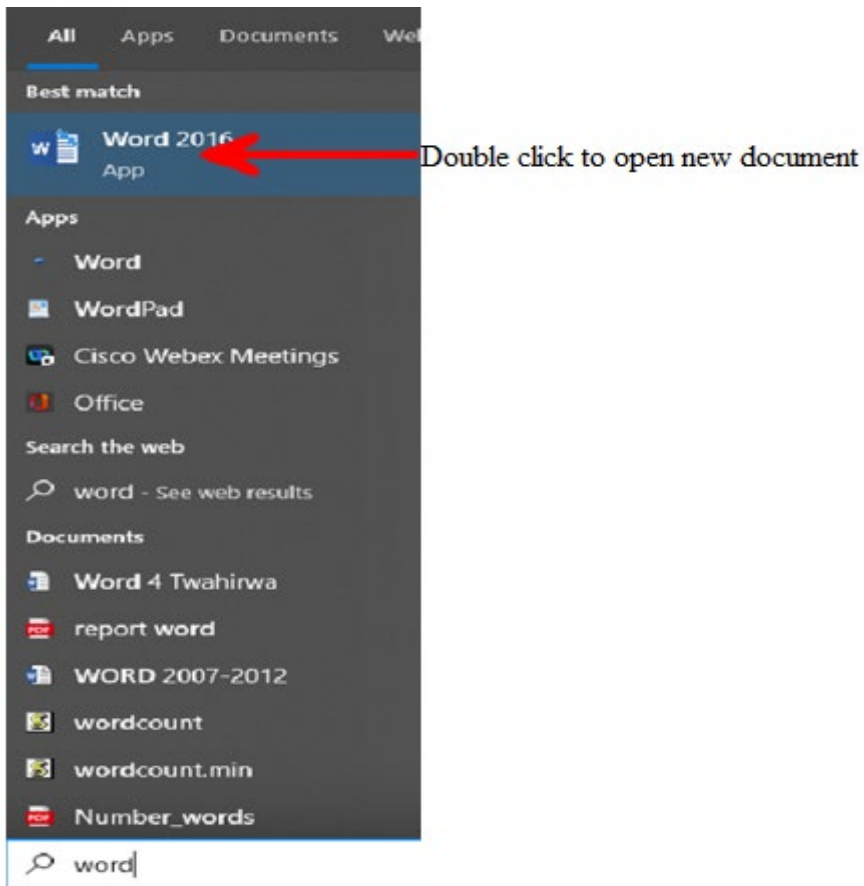
2.1.1. Creating and saving document in alternative File Formats step by step

a) Creating new document

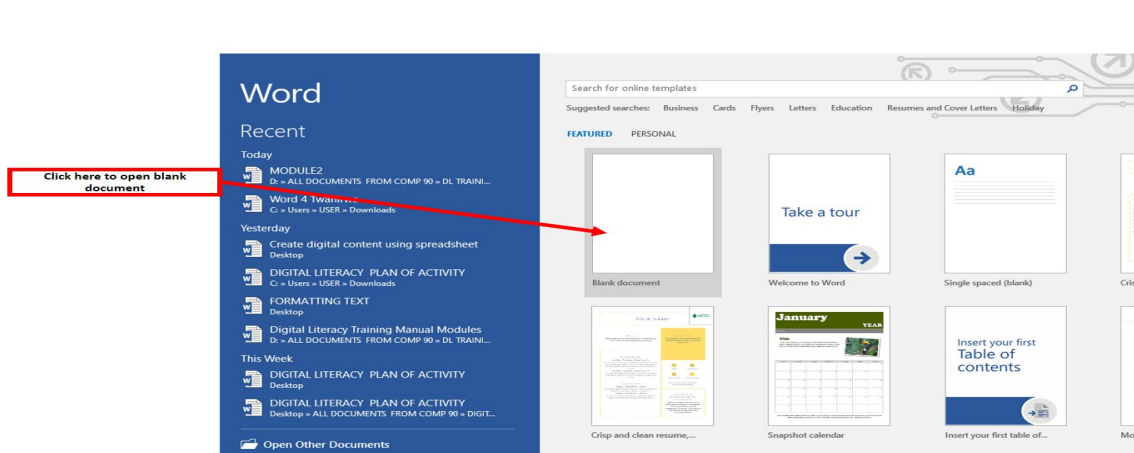
Step 1: Click on **Start** button on the taskbar or typing **Word** in search Menu. The MS word appears



Step 2: We will use word 2016 as the office installed if office 2016 version, and there are different versions of office, you can choose the one to use depending on your choice.



Step 3: To create a new blank document, **Click the Microsoft Office button.** The blank Document dialog box appears. Select Blank document under the Blank and recent section. It will be highlighted by default.

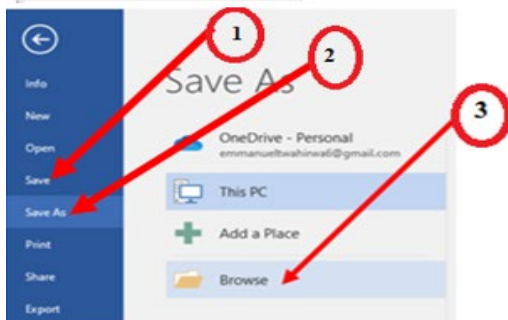
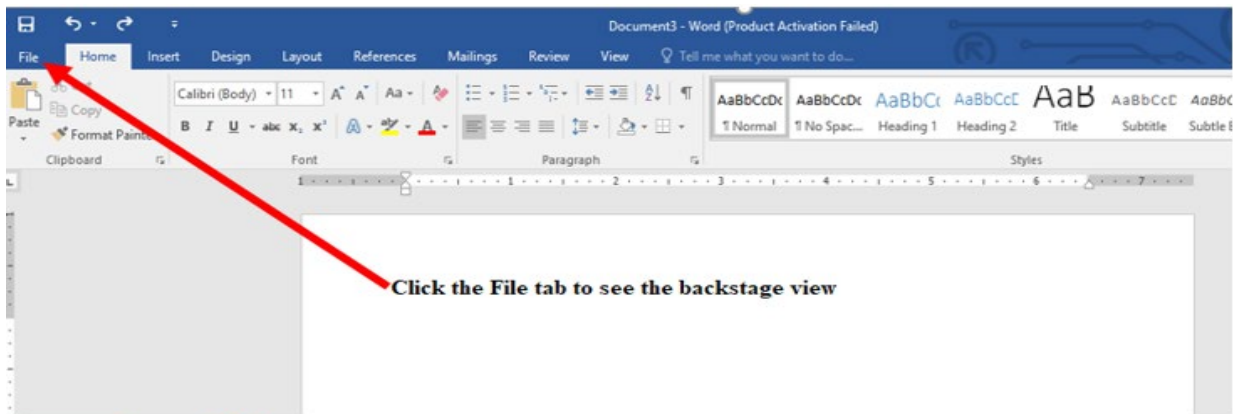


b) The MS Word user interface



1. Quick access toolbar
2. Tabs
3. Ribbon

c) Saving a document

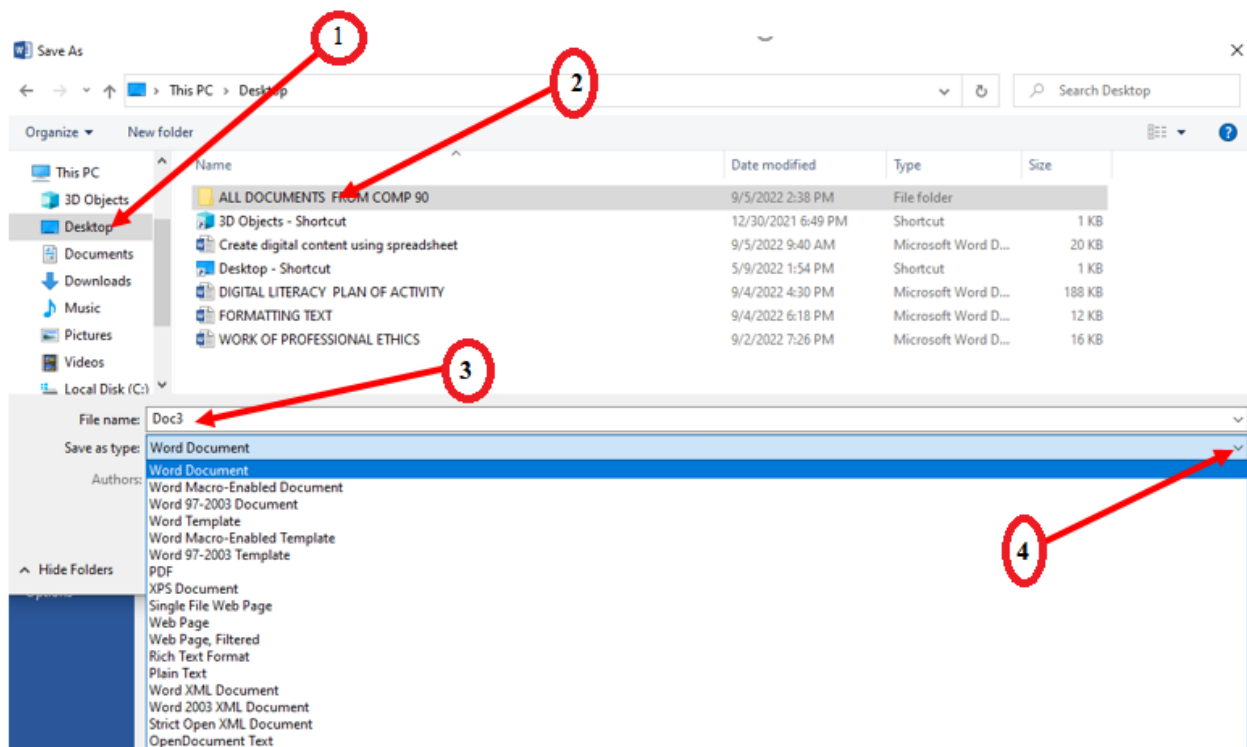


1. Used to save added content or as new document
2. Used to save a new document
3. Click on Browser to choose Folder, file format and rename a documents

Backstage view provides a range of options that are used to manage and print documents; for example, view and edit document properties, and open, save, print and share documents.

- **Save As** - allows file name, file type, and location to be specified and is used to save a newly created document, or to save another copy of a previously saved document.
- **Save** - allows you to save/update changes to a document.

d) Saving a document in alternative file formats in a created folder



1. Folder location
2. Created folder
3. Rename file document
4. All file format

2.1.2 Text editing

In this section, you will learn about to change the appearance of your text in a desired format through the following steps:

a) Selection of text

Use the following to select, a word, a sentence, a text or a paragraph

- Quickly double-click that word, to select a single word.
- Press **Ctrl + Shift + down arrow** on your keyboard, to select a paragraph, place your cursor at the start of the paragraph,
- and press **[Shift]+ down arrow**, to move one character or one line at a time, hold down the [Shift] key while pressing the right and left arrow keys and the up and down arrow keys, respectively.
- **Triple-click:** A triple-click selects the current paragraph.
- **Ctrl+A:** selects the entire document.
- **Ctrl+click:** To select a sentence (not just a line), hold down [Ctrl] and click any place within the sentence.
- **Ctrl + Shift + Right arrow | Left arrow:** Use this combination to select from the current position to the right or left of the current word, depending on whether you press the right or left arrow, respectively.

b) Editing text in a document

In Microsoft Word, you can edit text using either “Insert mode” or “Overtyping mode”:

- **Insert mode** is the default way of entering text. In this mode, the text you type is inserted at the insertion point.
- **Overtyping mode**, existing text to the right of the insertion point is replaced as you type.

c) Deleting text

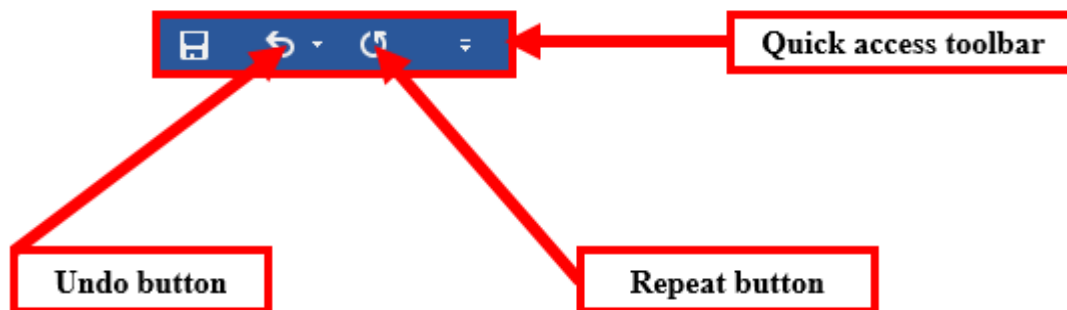
To delete single characters or text, you use the [Backspace] or [Delete] key. The Backspace key deletes the character or text to the left of the insertion pointer. The Delete key deletes the character or text to the right of the insertion pointer.



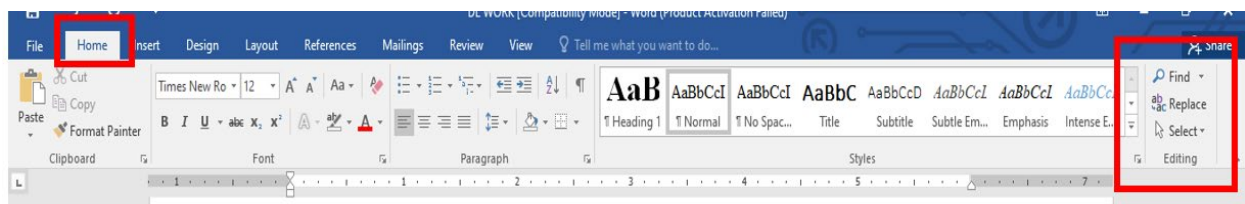
d) Copying, moving/pasting text

- **Cut-Paste:** will remove the original content from the document and place it in a new
- **Copy-Paste:** inserts the content to a new location without removing the original content.

e) Using undo, redo and repeat

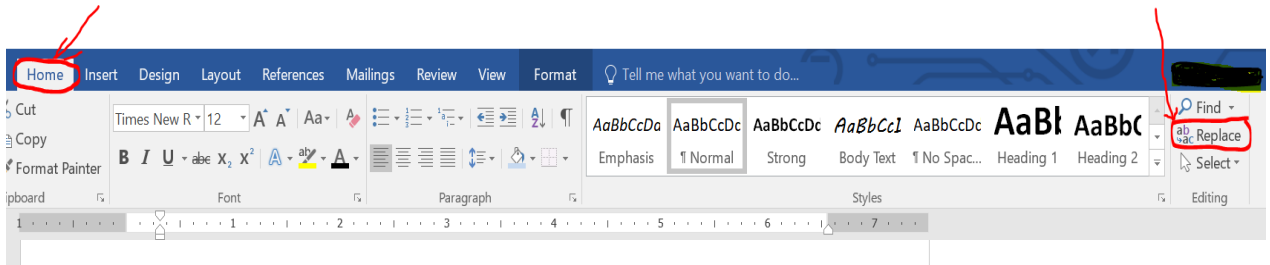


f) Find and replace a text

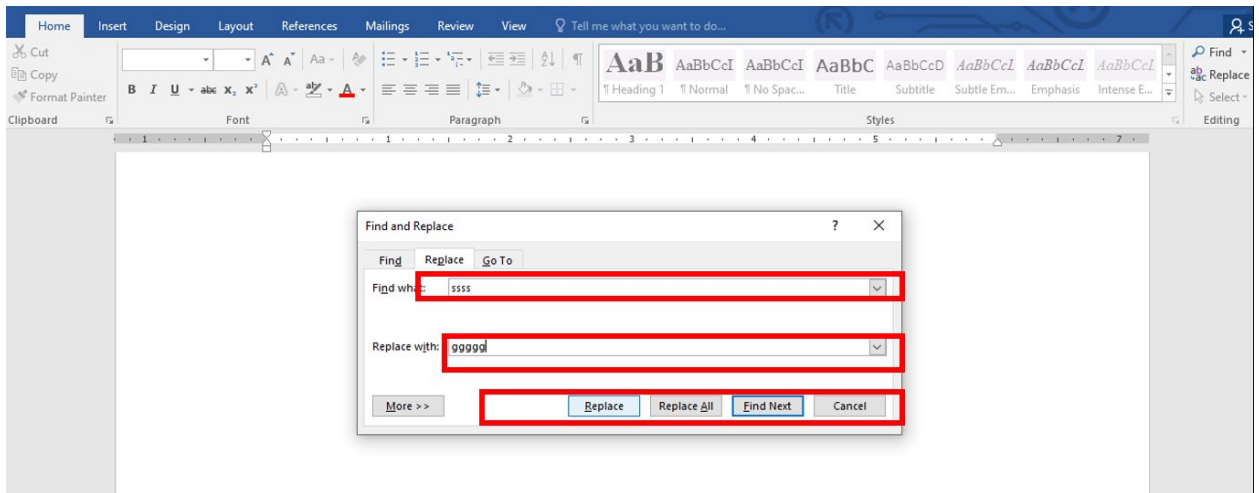


Go through the following steps to replace a document:

1. Go to **Home** then click on **Replace**.



The following will appear



2. Enter the word or phrase you want to replace in **Find what**.
3. Enter your new text in **Replace with**.
4. Click **Replace All** to change all occurrences of the word or phrase. Or, select **Find Next** until you find the one you want to update, and then click **Replace**.

2.1.3 Text Formatting

Text formatting allows your documents to appear more professional. You can format text in Microsoft Word by changing font types, font size, and font style, including bold, italics, underline and color. The Font and the Paragraph groups on the **Home tab** allows you to format your selected text.

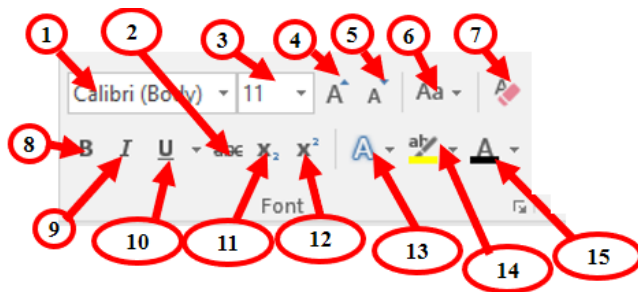
a) Font groups formatting

This group provides basic controls for font, style, and color settings of the selected text. Controls displayed on a context-sensitive basis:

- **Fonts** Select from the installed fonts by doing any of the following:
 - Click the arrow to drop down the list, then click on the desired font.

- Click in the text box and start to type the name of the desired font. Hit **Enter** on your keyboard to apply the selected font.
- **Size** Select or type the size of the text in Points.
- **Bold** Click to turn the text bold, or turn it back to non-bold.
- **Italic** Click to turn the text italic, or turn it back to non-italic.
- **Underline** Click to underline the selected text with the actual style (displayed on the button).
 - To change the style, click on the arrow to drop down the list of underline styles, and then select one.
 - To remove the underline, click the button again.
- **Strike-Through** Click to strike-through the selected text. Click again to remove strike-through.
- **Superscript** Click to make the text superscript. Click again to remove superscript.
- **Subscript** Click to make the text subscript. Click again to remove subscripts.
- **Font Color** Click to color the selected text with the actual color (displayed on the button).

b) Text formatting toolbar



1.Font	2. Strike through	3. Font size	4. Grow Font	5.Shrink Font
6. Change case	7. Clear all formatting	8. Bold	9. Italic	10. Underline
11.Subscript	12. Superscript	13. Text Effect and typography	14. Text Highlight color	15. Font color

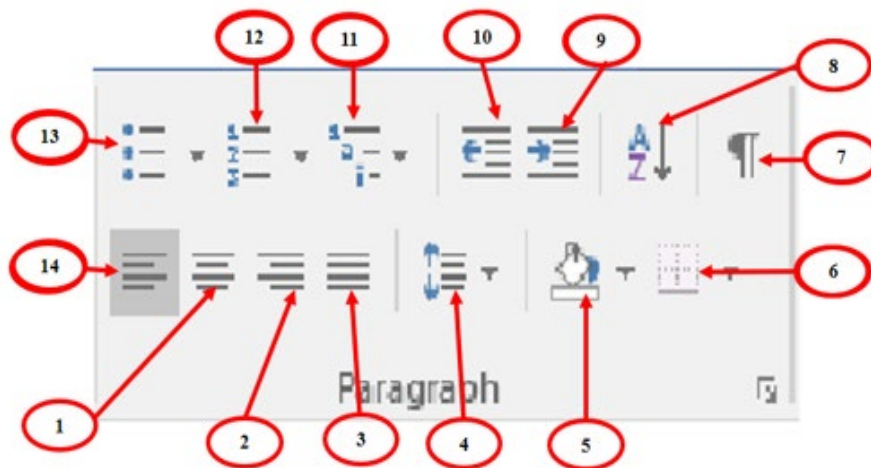
c) Paragraph group Formatting

Paragraph formatting refers to formatting commands that affect entire paragraphs – settings such as indenting, bullets, line spacing and paragraph spacing. To understand paragraph formatting and how it works, you need to understand what a paragraph is.

In this section, you will learn about:

- Creating and merging paragraphs
- Aligning paragraphs
- Aligning text with click and type
- Paragraph spacing
- Line spacing
- Applying border/shading to paragraph/text
- Copying paragraph formats

Paragraph group Formatting icons



1.Align Center	2. Align Right	3. Justify	4.Line and Paragraph Spacing	5. Shading
6. Borders	7.Show or Hide Marks	8.Sort	9.Increase Indent	10.Decrease Indent
11.Multilevel List	12.Numbering	13. Bullets	14.Align Left	

2.1.4 Equation and special characters

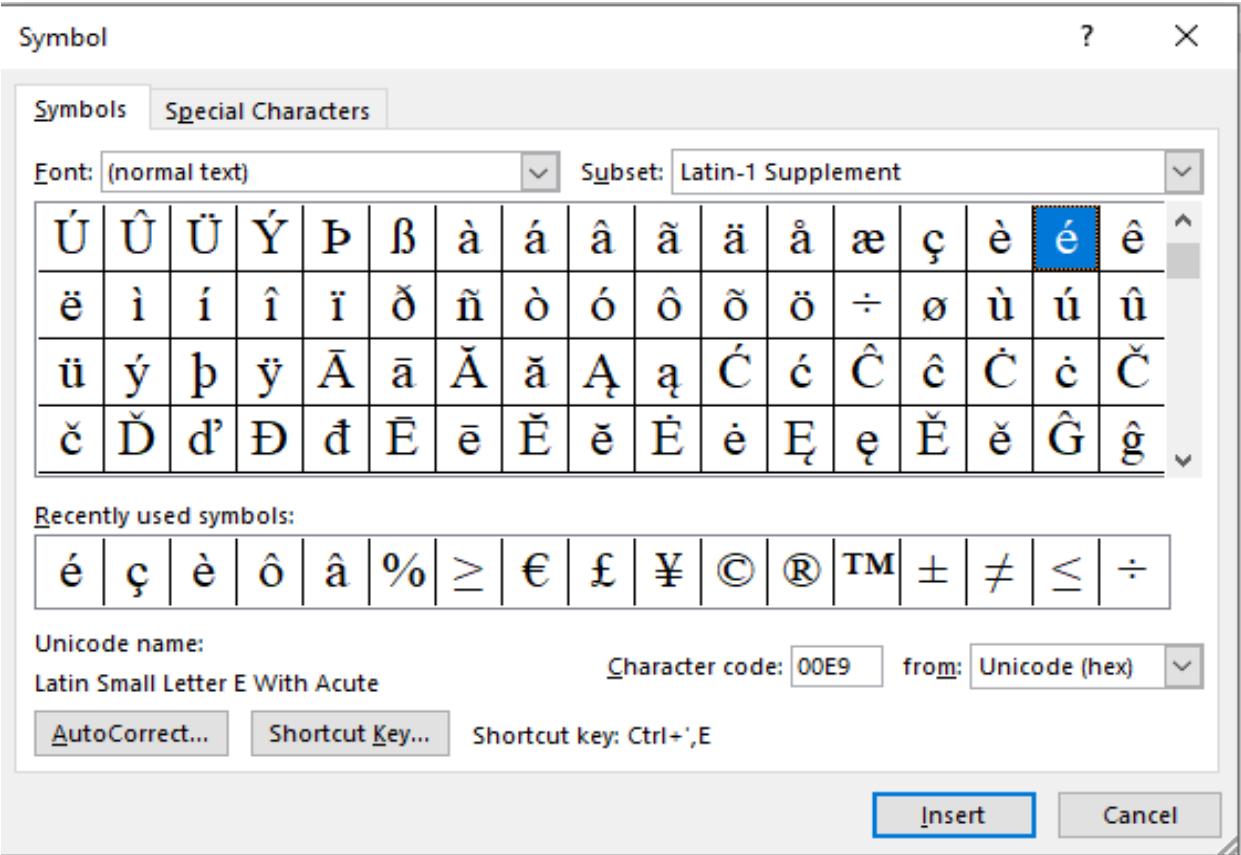
a) Insert a special character

A **special character** is a character that is not an alphabetic or numeric character. Punctuation marks and other symbols are examples of special characters.

Steps to insert special character:

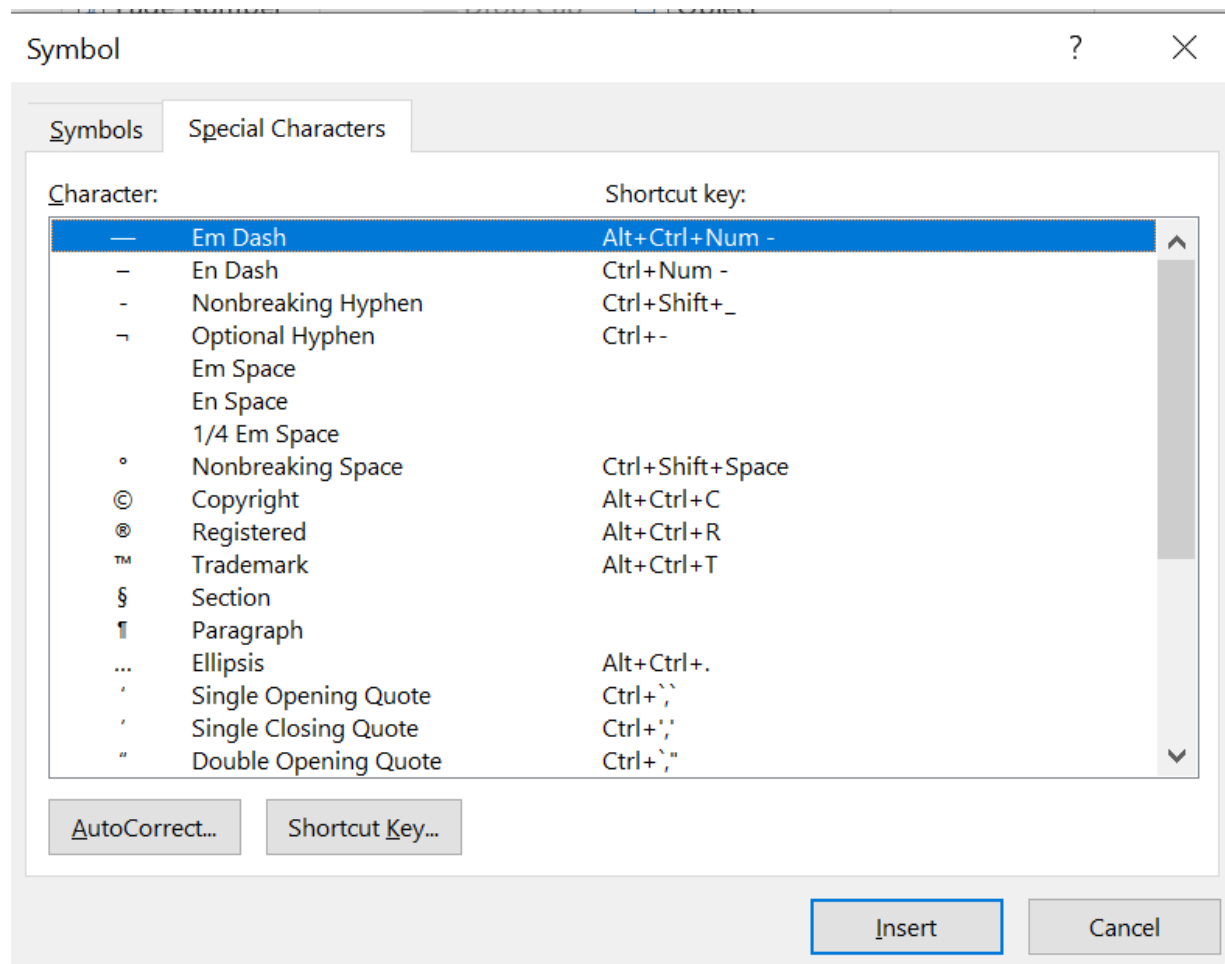
Go to Insert > Symbol > More Symbols.

The following dialog box will appear on the screen in which select the character that you want to insert.



Steps to insert special character:

Go to Insert > Symbol > More Symbols> Special Characters

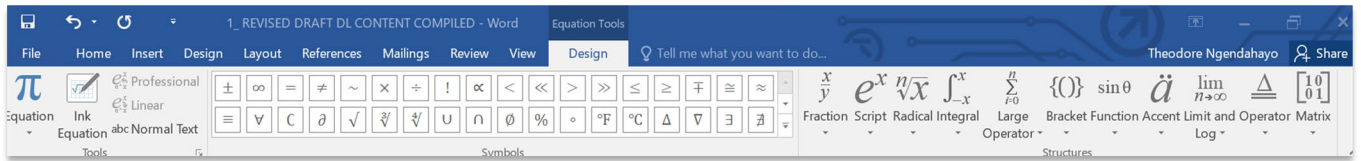


Double-click the character that you want to insert. Select Close. The special character is inserted into your text.

b) Inserting equation

Steps to inserting equation:

- i. Place cursor in the document where you want to insert an equation
- ii. Go to **Insert** tab in the Ribbon, click on the **Equation drop-down icon** in the Symbols section at the top right corner of the screen.
- iii. The following dialog box will appear on the screen in which select the equation that you want to insert.



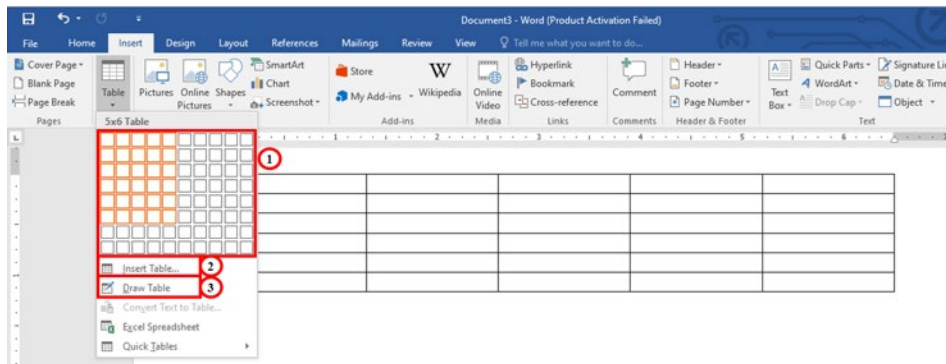
2.1.5 Insert table

Steps

Click on Insert tab > Table > Insert Table.

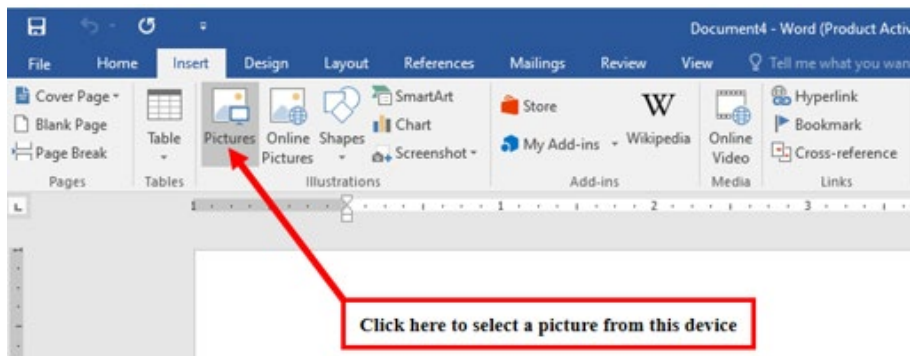
Table can be inserted in three ways

- Insert table by using grid.
- Insert table by filling rows and columns number.
- Insert table by drawing a table.

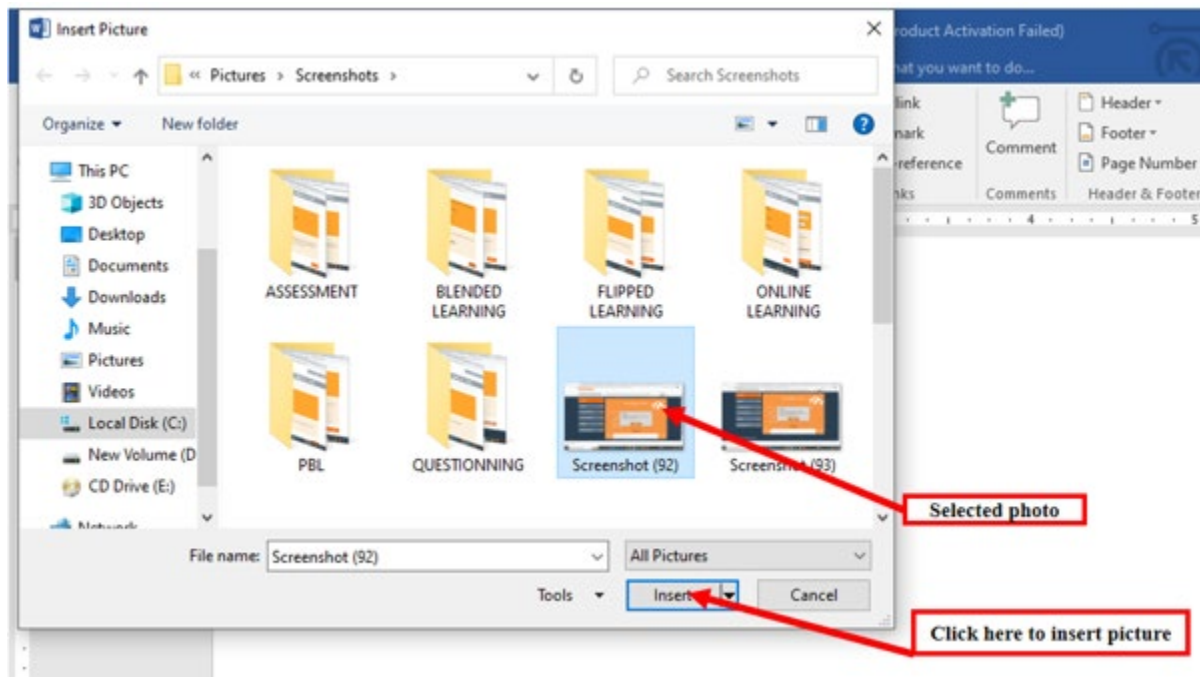


1.2.6 Insert picture

Click on Insert tab > Pictures

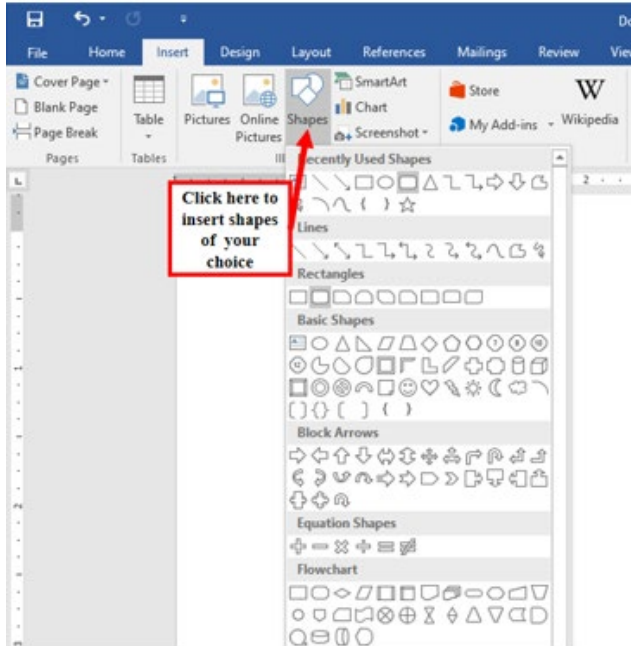


Browse the picture file from your computer



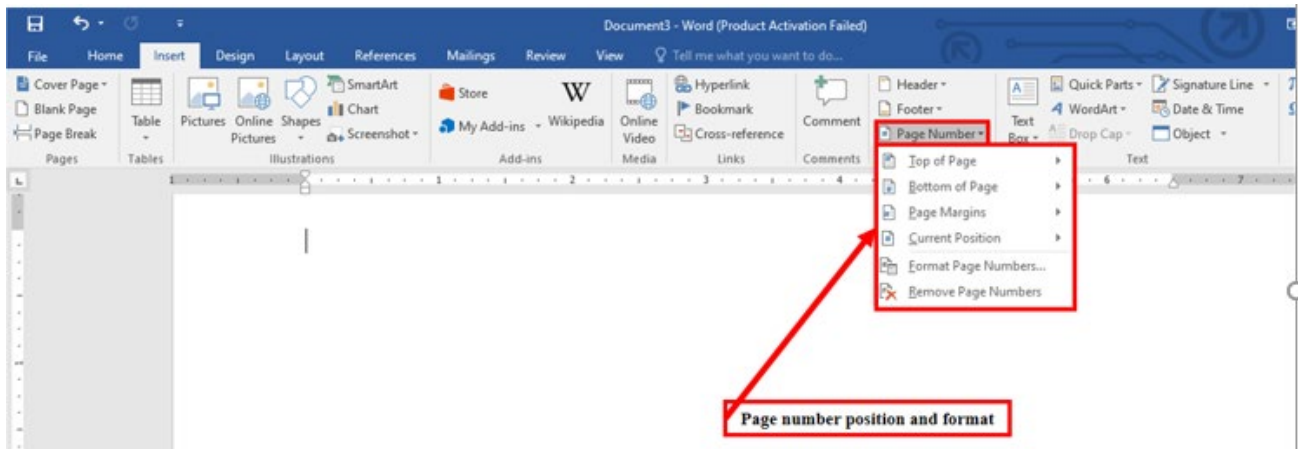
1.2.7 Insert shape

Click **Insert**, click **Shapes**, select a shape, and then click and drag to draw the shape. After you add one or more shapes, you can right click to choose add a text.



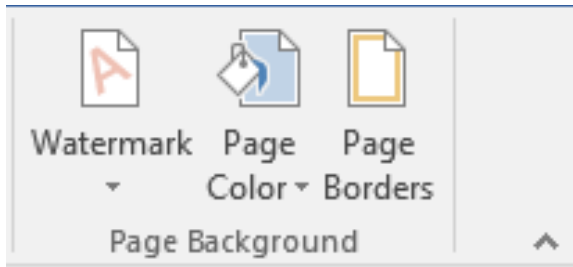
1.2.8 Insert page number

Click on the **Insert** tab, click the **Page Number** icon, and then click **Page Number**. Select a location, and then pick an alignment style. Word automatically numbers every page, except designated title pages. To change the numbering style, select **Format** and then choose the formatting you want to use.



1.2.9 Page background

The **Design** Tab includes document formatting and **Page Background**. But in the module, we focused on **Page Background** which includes watermark, **Page color** and **page borders**.



a) Watermark

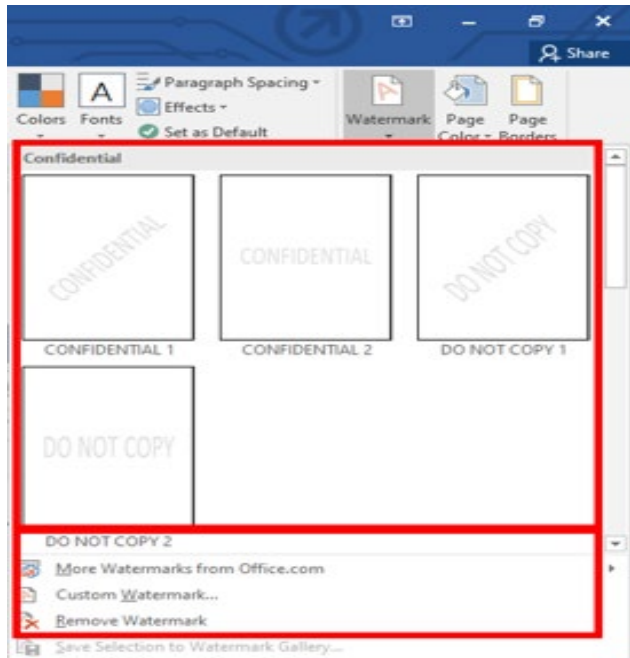
Insert a watermark step by step

- On the Design tab, select Watermark.
- Choose a pre-configured watermark, like DRAFT, CONFIDENTIAL, or DO NOT COPY.
- For placing a logo or image, Select Watermark > Custom Watermark > Picture watermark > Select Picture. On the same menu you can create a custom text watermark.

Insert a text watermark



1. The following window will appear on the screen. Click on the Custom Watermark option.



2. The following window will appear on the screen. Click on the Custom Watermark option.

A Printed watermark dialog box will appear on the screen. Click on the Text watermark radio button and do the following:

Click on the Language: Select the language from the drop-down menu for the Watermark.

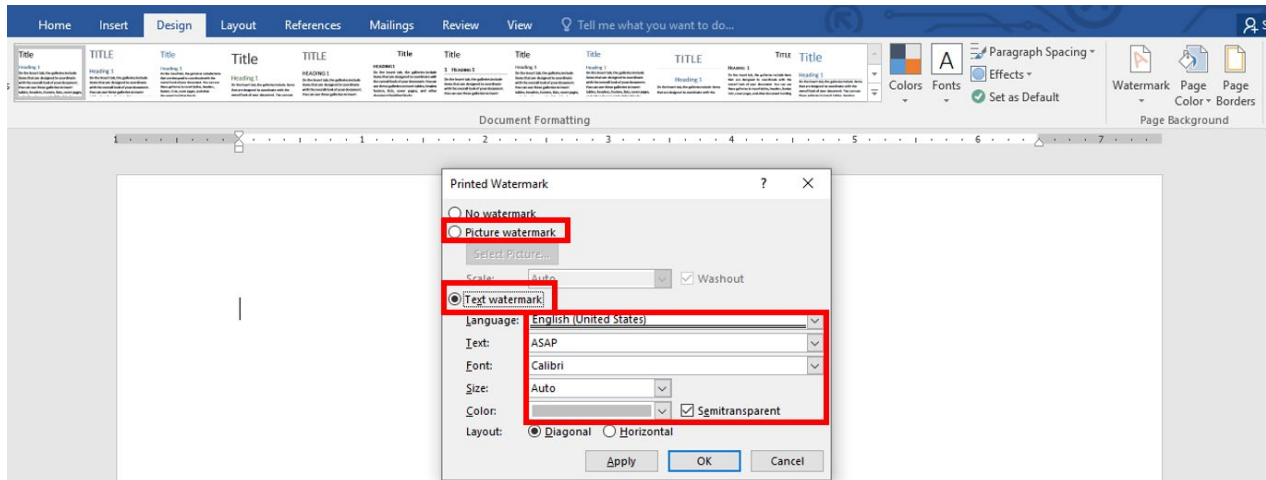
Text: Type the text that you want to insert in the document as a watermark.

Font: Click on the drop-down menu associated with the font to select the font that you want to add Watermark.

Size: Select the size for the Watermark.

Color: Select the color of the text that you want to add to the Watermark.

Layout: click on either Diagonal or Horizontal layout for the Watermark.



Insert a picture watermark

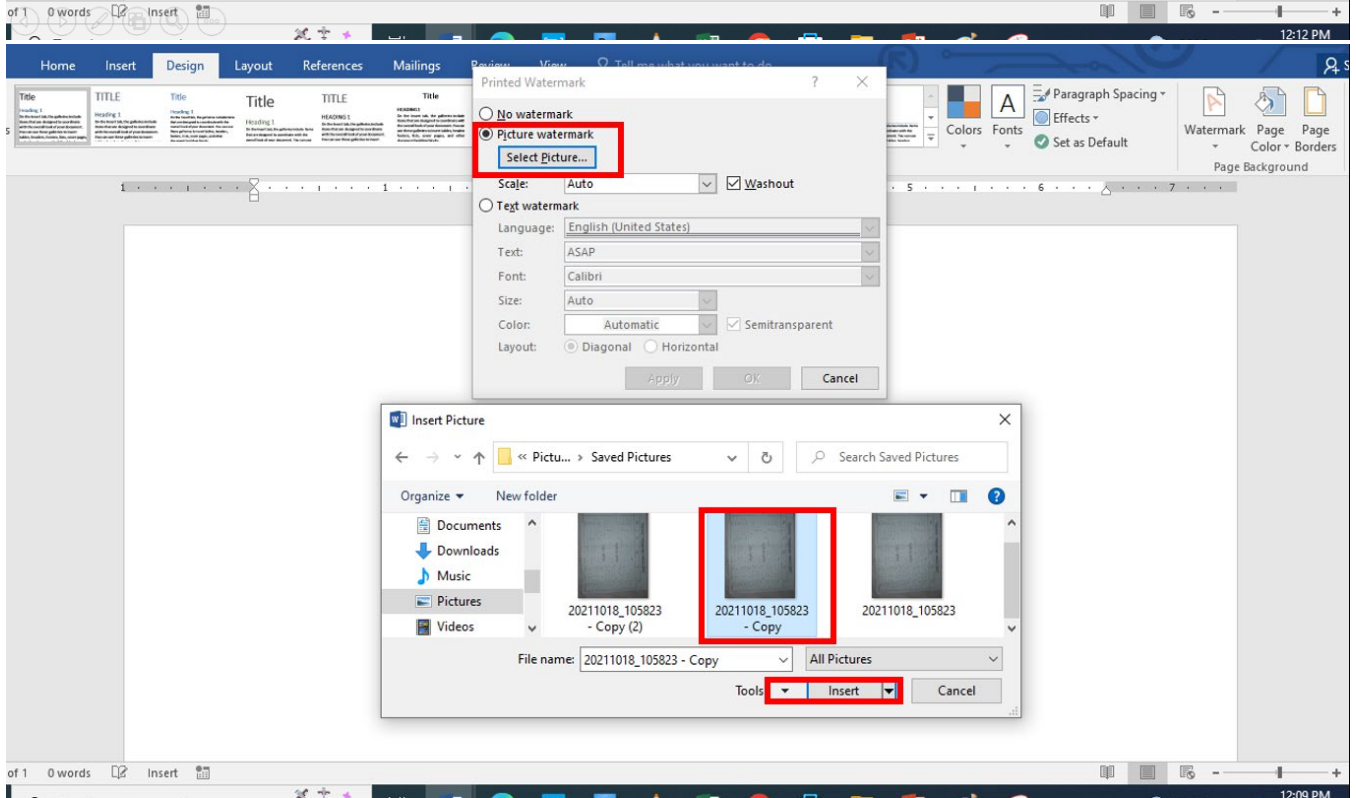
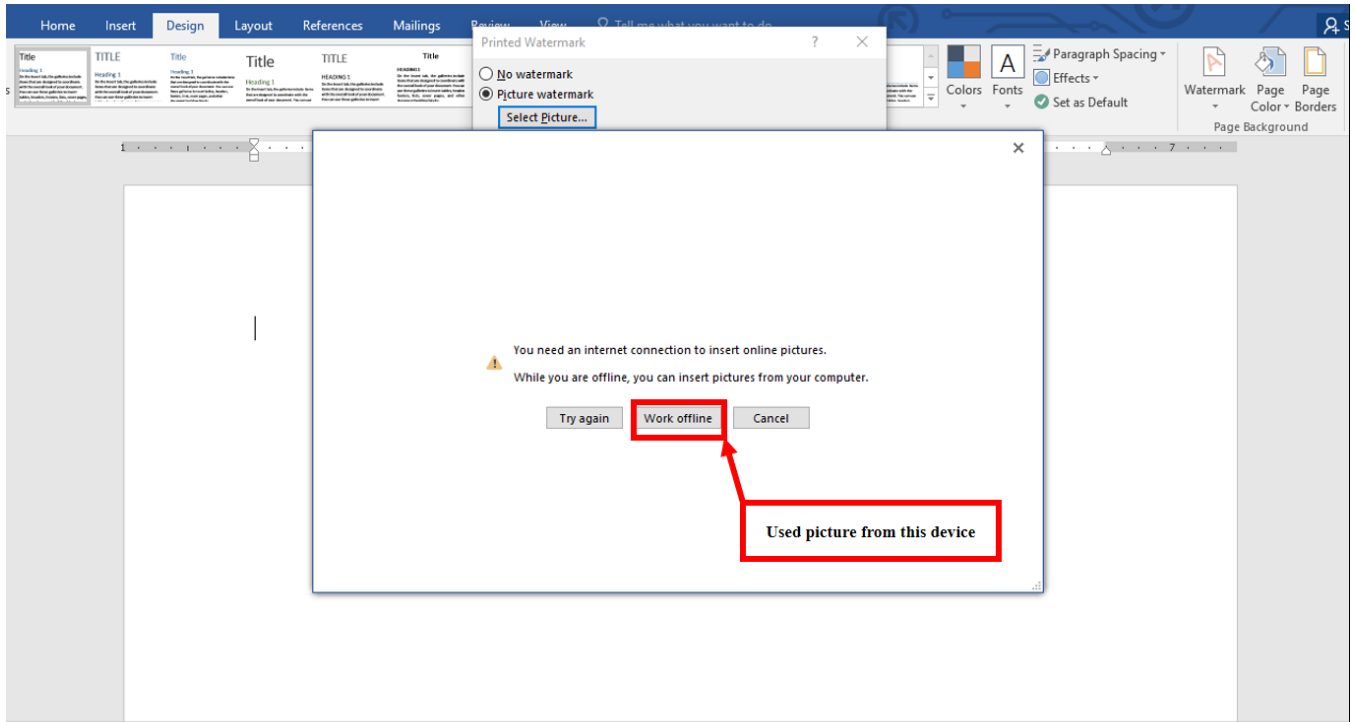
Microsoft Word not only allows you to insert Watermark inside the text, but you also insert watermark in the form of an image. An image Watermark can be a logo of a company or a simple attractive image.

You can use below-mentioned steps to insert a picture watermark:

Step 1: Go to the page layout tab and click on the Watermark option.

Step 2: A window appears on the screen in which click on the Custom Watermark.

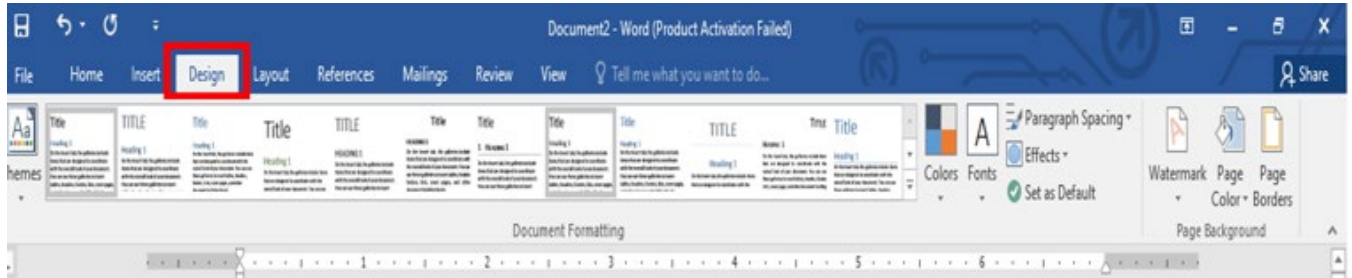
Step3: A Printed Watermark dialog box will appear on the screen. Click on the Picture watermark radio button, click on the Select Picture button to browse the image that you want to insert and click on the OK button at the bottom of the screen.



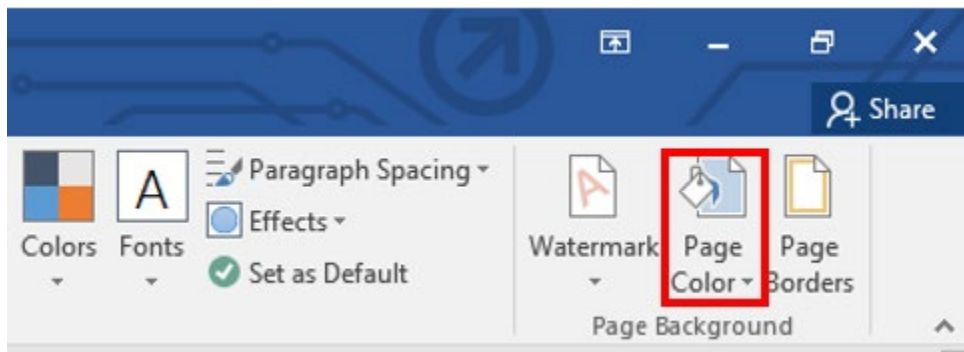
b) Page color

Go to **Design > Page Color**. Choose the color you want under Theme Colors or Standard Colors. If you don't see the color you want, select More Colors, and then choose a color from the Colors box.

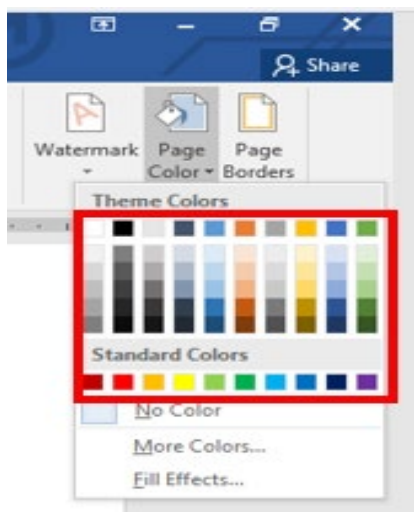
Select the **Design** tab in the ribbon.



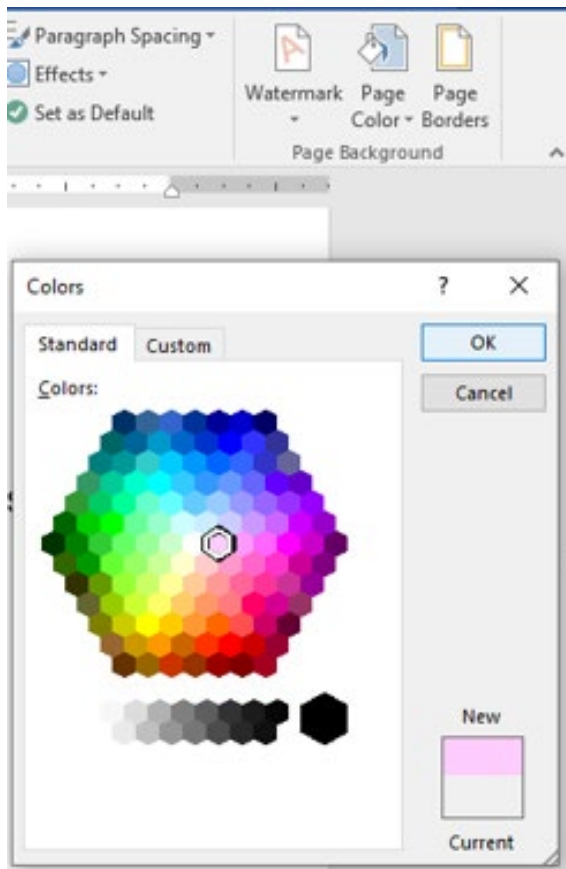
- Select the **Page Color** button in the Page Background group.



- Choose a color from the drop-down menu.



(Alternative) Select **More Colors** in the Page Color menu, and then choose advanced color options from the Colors dialog box.



- After making your choice, your page background color should change immediately.
- If you want to remove the page background color, reselect the Page Color button and then select **No Color** from the drop-down menu

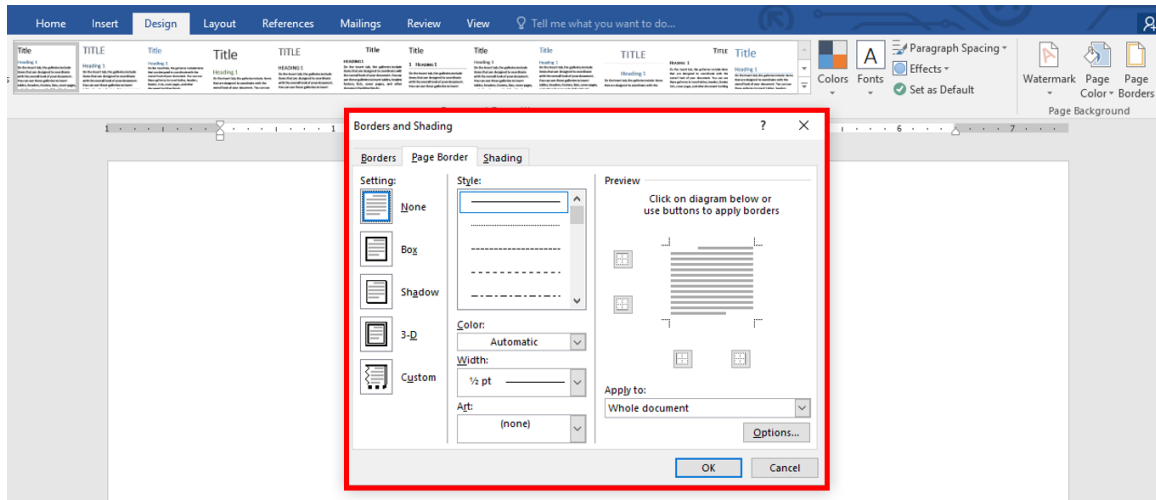
c) Page borders

Add a page border in Word document

1. Go to the Page Layout tab and click on the Page Borders in the Page Background box.

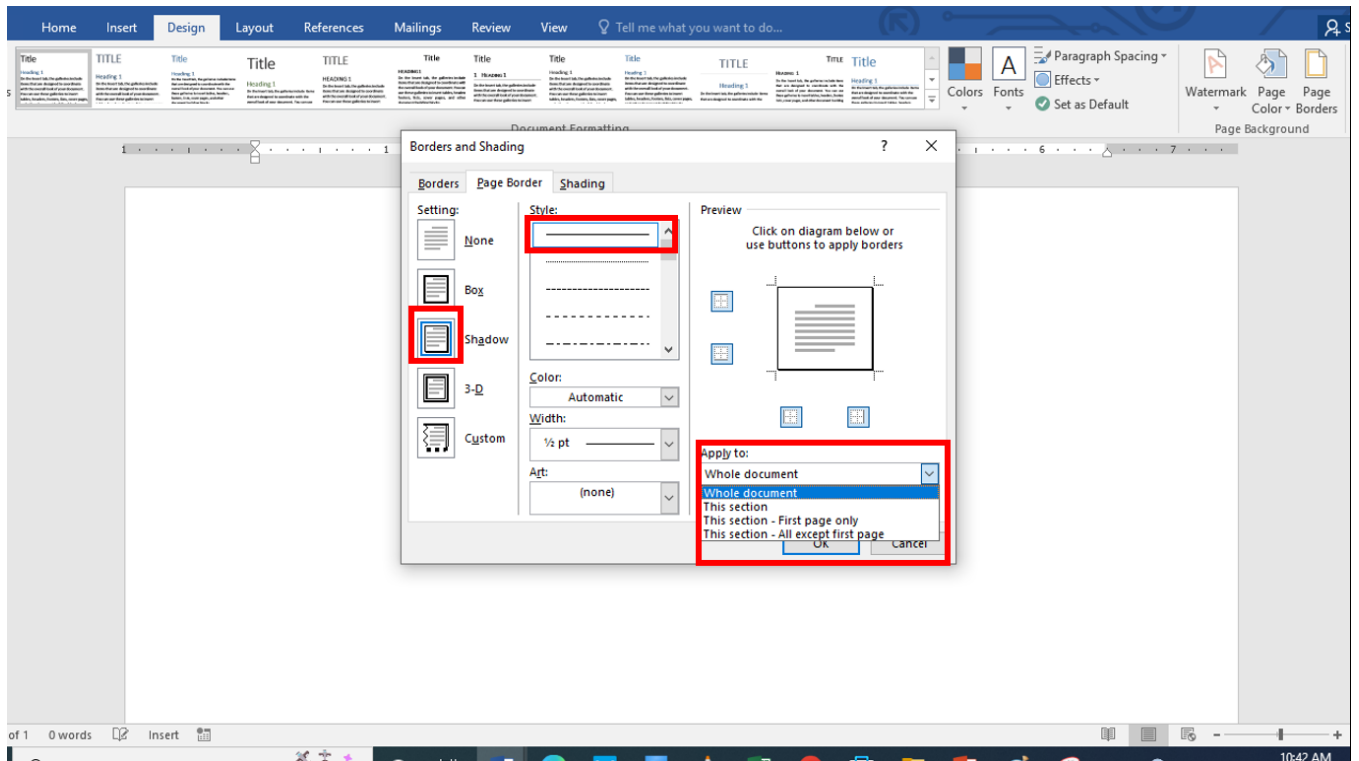


2. A Borders and Shading window will appear on the screen

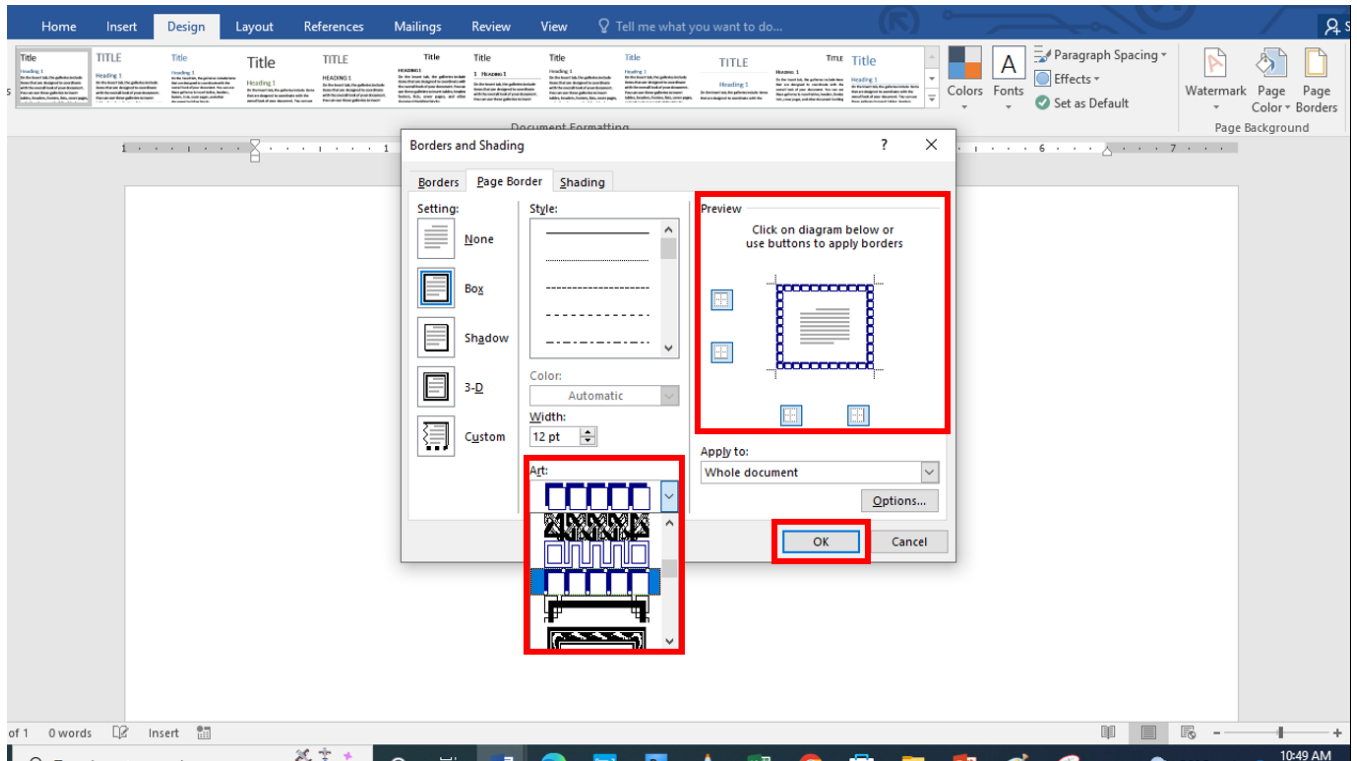


3. Select the **Shadow** option to give shade around your page.

- Select a **line**, from the **style** section that you want to add as a line border of your page.
- **Choose the color** that you want to add on the border.
- **Define the width** of the border using the **Width** drop-down menu.
- Click on the **Apply to** drop-down menu to select the page and document in which you want to apply a border.
- Click on the **OK** button at the bottom of the screen.



Instead of lines, you can also add designed shapes in the border. To add design, click on the Art drop-down menu and select the border design that you want to add on the page.



1.2.10 Layout Tab Menu

Page setup

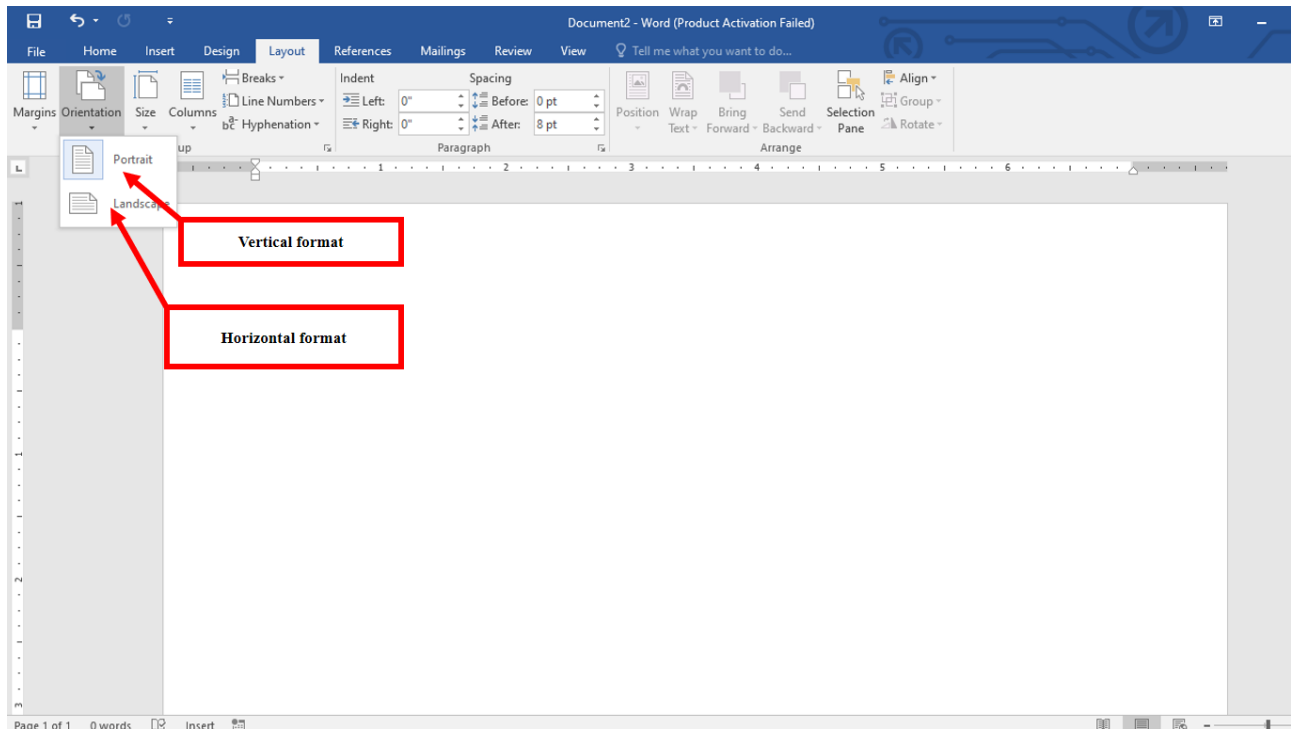
The Page Layout Tab **holds all the options that allow you to arrange your document pages just the way you want them.** You can set margins, apply themes, control of page orientation and size, add sections and line breaks, display line numbers, and set paragraphs. But this module focused on control of page orientation and Text column

a) Page orientation steps

Layout > Page Setup dialog box launcher. In the Page Setup box, under Orientation, click Portrait or Landscape.

Portrait format refers to a vertical orientation or a format which is taller than it is wide.

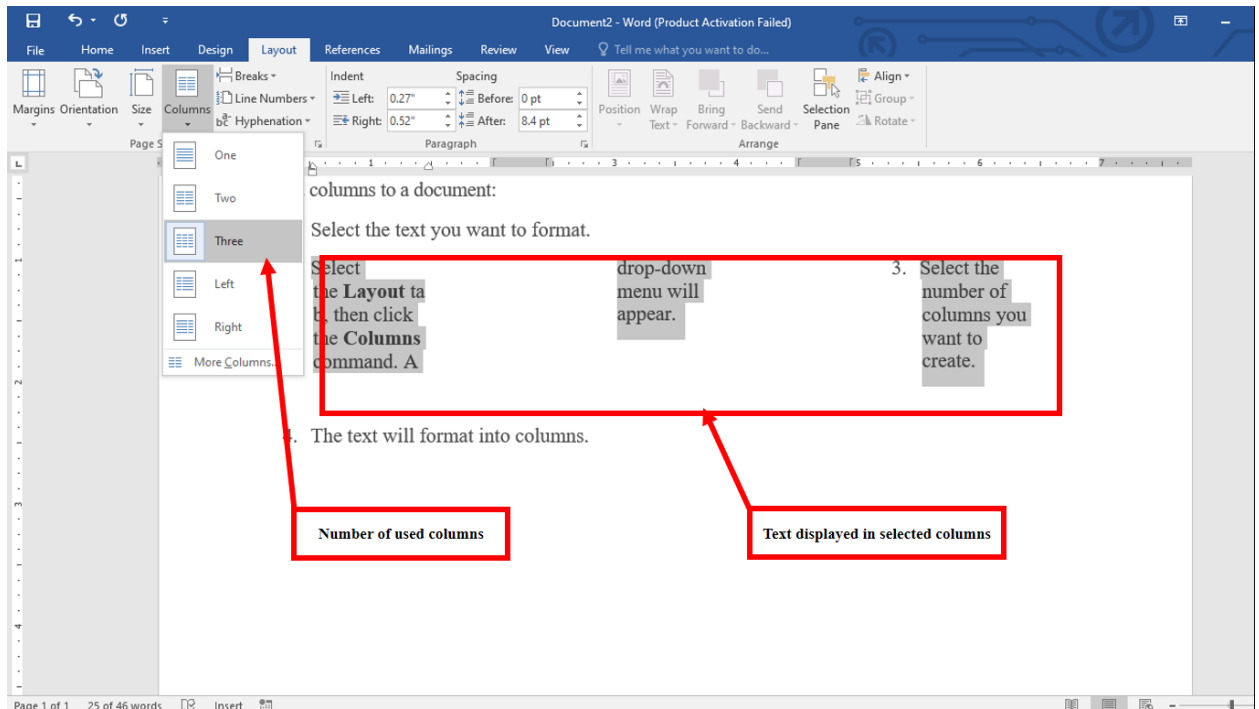
Landscape format refers to a horizontal orientation or format which is wider than it is taller



b) Text column

To add columns to a document:

1. Select the text you want to format.
2. Select the **Layout** tab, then click the **Columns** command. A drop-down menu will appear.
3. Select the number of columns you want to create.



4. The text will format into columns.

List of basic computer shortcut keys

Alt + F	File menu options in the current program.
Alt + E	Edits options in the current program.
F1	Universal help (for any sort of program).
Ctrl + A	Selects all text.
Ctrl + X	Cut the selected item.
Ctrl + Del	Cut selected items.
Ctrl + C	Copy the selected item.
Ctrl + Ins	Copy the selected item.
Ctrl + V	Paste the selected item.
End	Go to the end of the current line.

Ctrl + End	Go to the end of a document.
Ctrl + (Left arrow)	Move one word to the left at a time.
Ctrl + (Right arrow)	Move one word to the right at a time.

1.3 PRACTICE

Activity2:

In the sixteenth century, an age of great marine and terrestrial exploration, Ferdinand Magellan led the first expedition to sail around the world. As a young Portuguese noble, he served the king of Portugal, but he became involved in the quagmire of political intrigue at court and lost the king's favor. After he was dismissed from service to the king of Portugal, he offered to serve the future Emperor Charles V of Spain.

A papal decree of 1493 had assigned all land in the New World west of 50 degrees W longitude to Spain and all the land east of that line to Portugal. Magellan offered to prove that the East Indies fell under Spanish authority. On September 20, 1519, Magellan set sail from Spain with five ships. More than a year later, one of these ships was exploring the topography of South America in search of a water route across the continent. This ship sank, but the remaining four ships searched along the southern peninsula of South America. Finally, they found the passage they sought near a latitude of 50 degrees S. Magellan named this passage the Strait of All Saints, but today we know it as the Strait of Magellan.

QUESTIONS

From the below two paragraph, do the following

Create a folder on Desktop and name it, **Your full name**

Copy and paste the two above paragraph in blank document of word to save it in created folder with your full name

Bold the second paragraph and change font of 1st paragraph to bookman old font

Put **yellow** color as the background page color

Put title of the document in **Bold**

Save your work in created folder

MODULE 3: CREATE DIGITAL CONTENT WITH SPREADSHEET

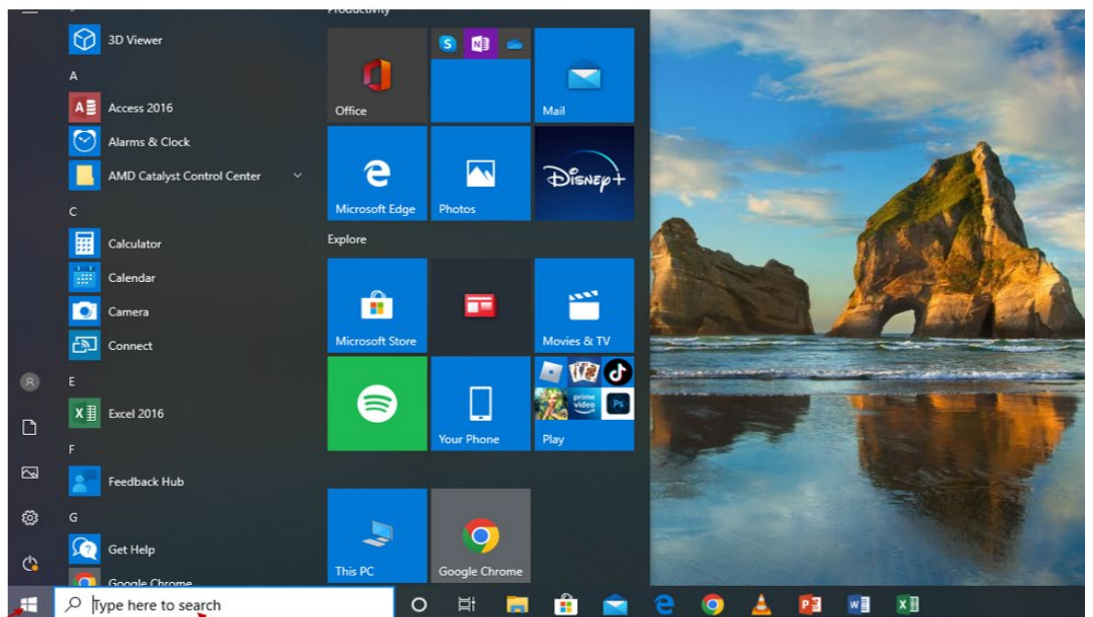
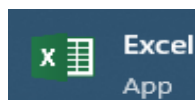
3.1. Exploring spreadsheet

Spreadsheet or Microsoft Excel in windows devices is a general-purpose program used to organize, calculate, and analyze data.

This program performs numerous functions and formulas to assist the users in their projects.

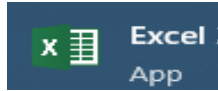
3.1.1. Working with MS Excel

a. Starting MS Excel

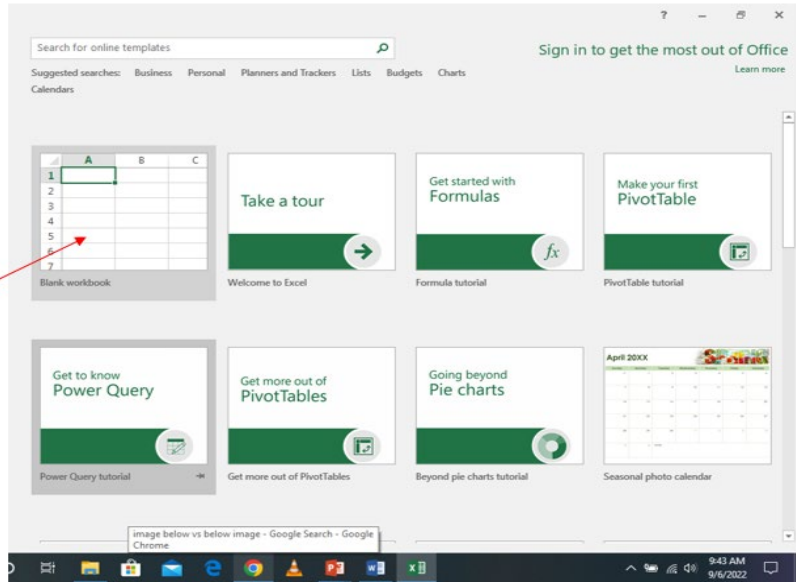


Start button

Search bar

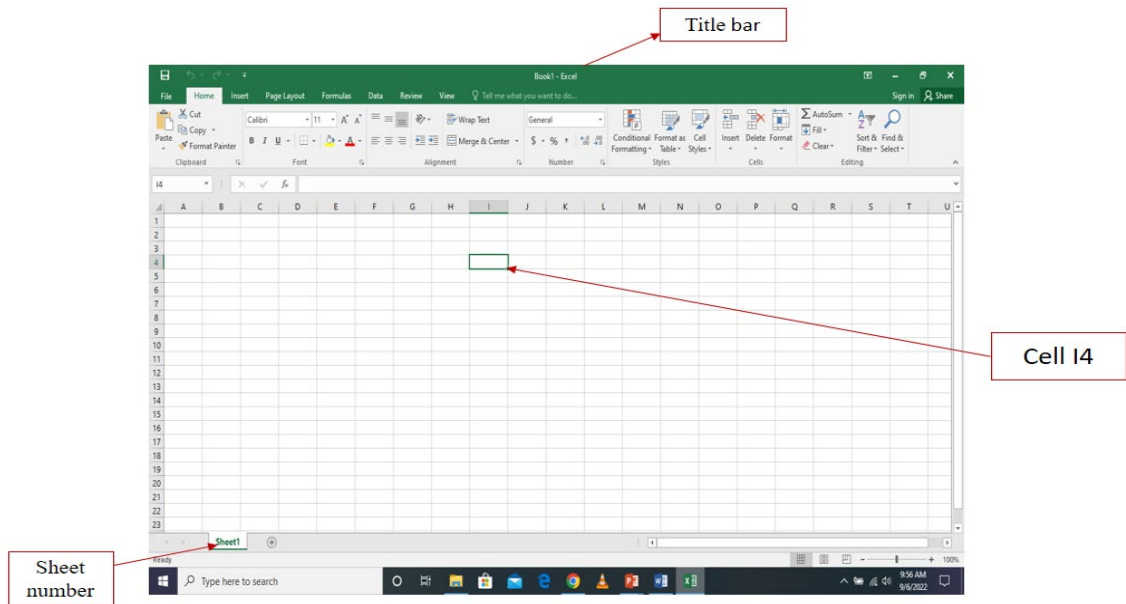


Blank workbook



b. Components of excel file

When the blank workbook icon is clicked, the new workbook will appear as shown in the below interface.



Excel file is called **workbook** in which we can create numerous **worksheets** depending on the task.

Every worksheet is made up of thousands of rectangles, which are called **cells**.

A cell is the **intersection** of a **row** and a **column**—in other words, where a row and column meet.

Columns are identified by **letters (A, B, C, D, E, F, ...)**, while rows are identified by **numbers (1, 2, 3, 4, 5, 6, ...)**. Each cell has its own **name** or **cell address** basing on its column and row. In the above example, indicated cell intersects **column I** and **row 4** to make **cell I4**.

Note that the cells in your spreadsheet should each contain one piece of data.

	A	B	C	D	E	F	G	H	I
1	No	First Name	Last Name	Birth Date	Birth Place	Exercise no1	Exercise no2	Exercise no3	Total marks
2	1	HITIMANA	Felicien	2/12/1988	Musanze	36	38	40	
3	2	MUNEZERO	Bosco	15/08/2002	Rubavu	38	41	34	
4	3	MUTUYIMANA	Mireille	6/10/1995	Nyabihu	32	48	32	
5	4	NISHIMWE	Naome	2/1/1997	Musanze	45	41	39	
6	5	TUYISENGE	Olive	7/10/2003	Rutsiro	41	46	42	
7	6	UWUMUKIZA	Celine	25/02/1992	Gatsibo	50	45	47	

c. Cell splitting and cells merging

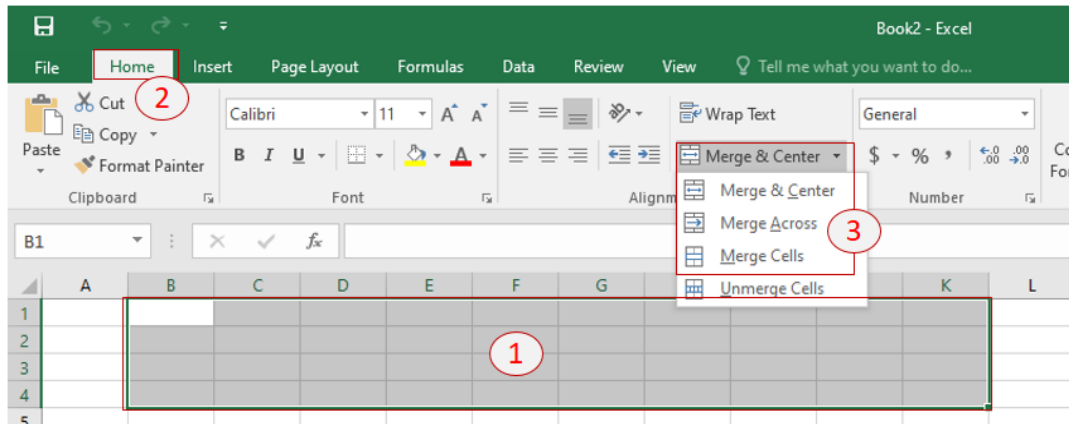
In your worksheet, you will sometimes face a situation where you will need to merge or split the cells according to your needs.

When the content to enter in a cell is bigger than the size of a cell, you can either split the cell which means increasing the size of a cell or you can merge the range of cells which means combining different cells.

➤ Steps to merge selected cells

1. Select two or more adjacent cells you want to merge.
2. Click at **Home menu** and click at **Merge and Center** if you want the content to be in center

3. If you want to merge cells without centering, click the arrow next to Merge & Center. Then click **Merge Across**, or **Merge Cells**



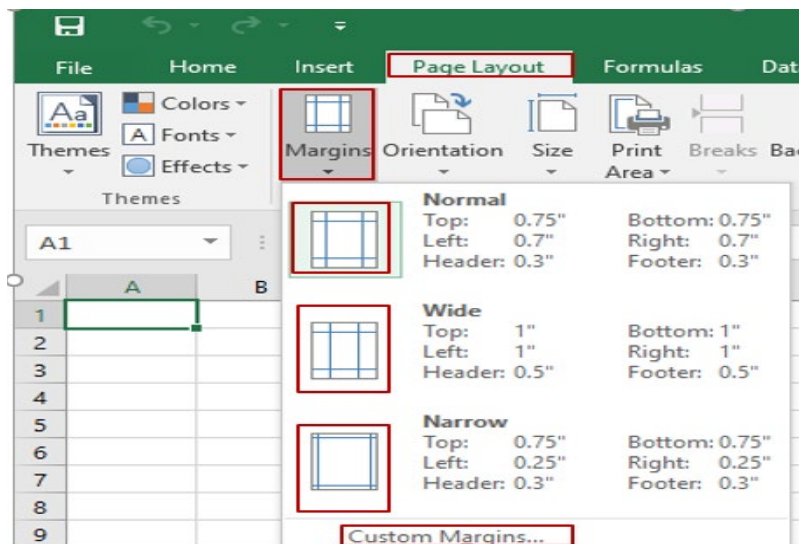
3.1.2. Managing Worksheets

Any information you enter into a spreadsheet will be stored in a cell. Each cell can contain different types of content, including text, numbers, formulas, and functions.

a. Setting Worksheet Margins

To set worksheet margins in your worksheet

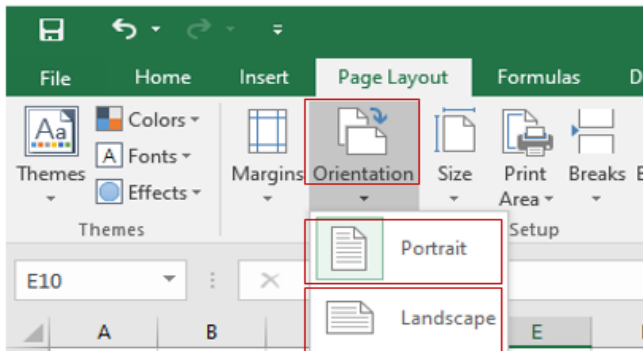
1. Click the **PAGE LAYOUT** tab.
2. Choose the margin format from the given list and you can even customize yours



b. Setting Worksheet Orientation

The worksheet can be set in portrait or landscape. To choose the one of your choice you must follow the below steps.

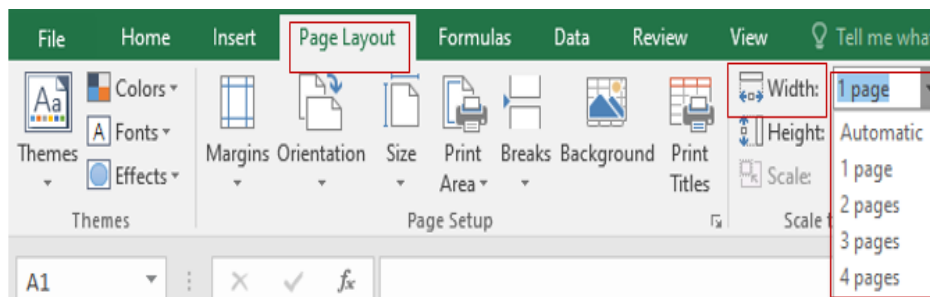
1. Click the **Page Layout** tab.
2. Click the down arrow of the **Orientation** button
3. Select one of your choice



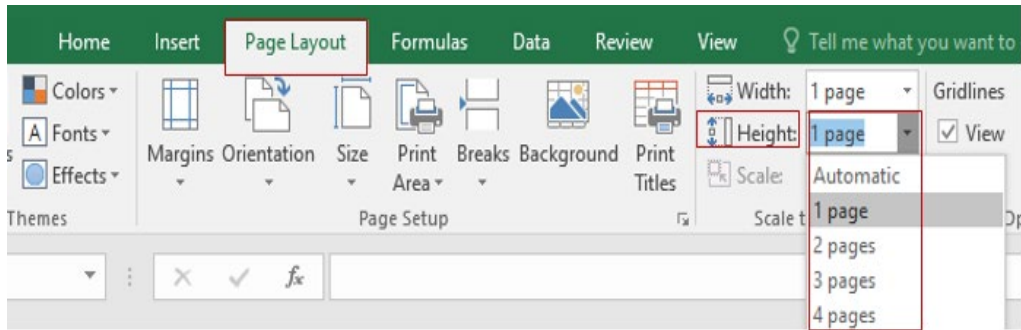
c. Scaling your Worksheet to fit the Pages

To scale your worksheet to fit the desired pages the below steps are recommended

1. On the **Page Layout** tab, click the down arrow of the **Width** button in the **Scale to Fit** group.
2. Select **pages of your choice** from the dropdown arrow at width



3. Select **pages of your choice** from the dropdown arrow at height



3.2. Data manipulation and organization

Microsoft Excel program is a widely used tool for data entry, storage, analysis, and visualization.

This topic in this module aims to introduce the use of formulas and functions in spreadsheets, data sorting and the use of charts.

3.2.1. Use of formulas and functions

In MS Excel or spreadsheet programs, the formula is a mathematical expression that computes the value of the range of given cells while functions are predefined formulas that are already in Excel.

a. Basic Formulas

Excel formulas allow you to identify relationships between values in your spreadsheet's cells, perform mathematical calculations with those values, and return the resulting value in the cell of your choice.

When you write formulas in Excel, you must begin with an **equal sign (=)** because the cell contains, or is equal to, the formula and its value.

Some of the mathematical operators that can be used in a formula are listed in the following table:

Operator	Performs
+ (plus sign)	Addition
- (minus sign)	Subtraction
* (asterisk)	Multiplication
/ (slash)	Division

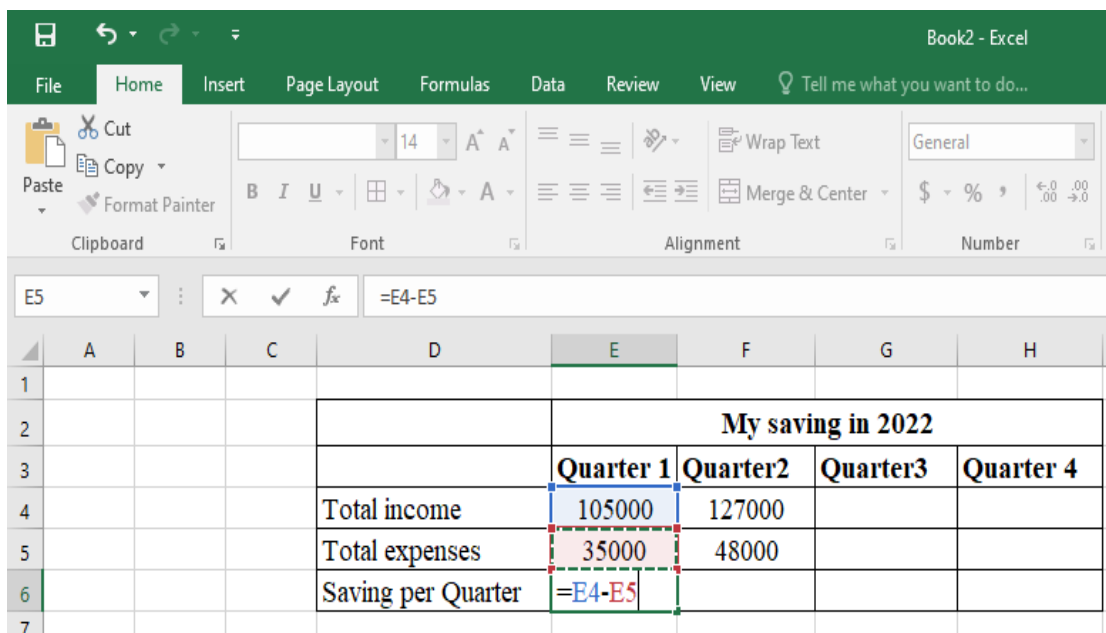
% (percent)	Converts a number into a percentage
-------------	-------------------------------------

For example

=A1+A2+A3 will return the sum of the cells range from cell A1 to cell A3

➤ **Entering Formulas**

- Enter data in cells
- Select the cell where the result will be displayed to make it the **Active Cell**.
- Type an equal sign (=) to begin the formula.
- Click on the first cell to be referenced in the formula
- Enter the operator
- Enter the next cell to be referenced in the formula
- Press on **Enter key**



b. Use of excel functions

Functions are predefined formulas that are already in Excel. Functions carry out specific calculations in a specific order based on the values specified as arguments or parameters.

The below table is for some basic functions.

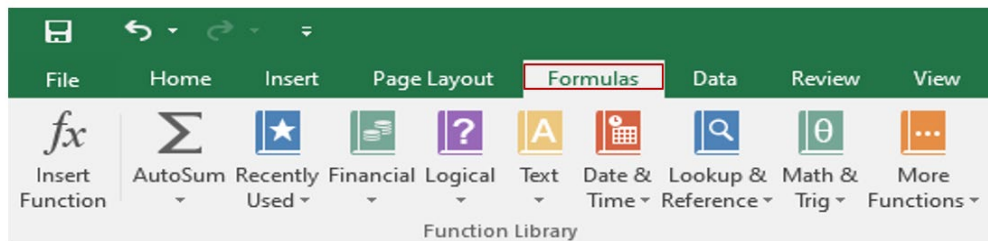
Function	Name	Description
Sum	SUM	Returns sum of the given range of cells
Average	AVERAGE	Returns average of the given range of cells
Minimum	MIN	Returns the smallest value in the range of cells
Maximum	MAX	Returns the largest value in the range of cells

For example

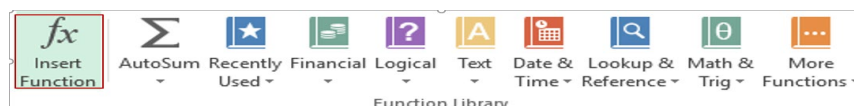
=AVERAGE (A1:A10) This function will return the mean value of the content from cells A1 through A10.

➤ Steps to using a function

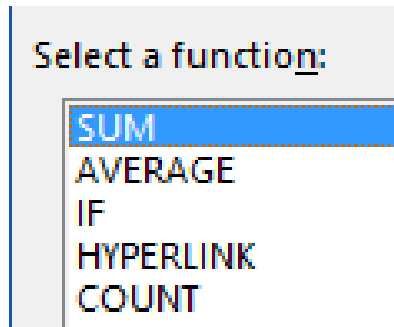
- b. Enter data in cells
- c. Select the cell where the result will be displayed to make it the **Active Cell**.
- d. On the **FORMULAS** tab in the **Functions Library** group,



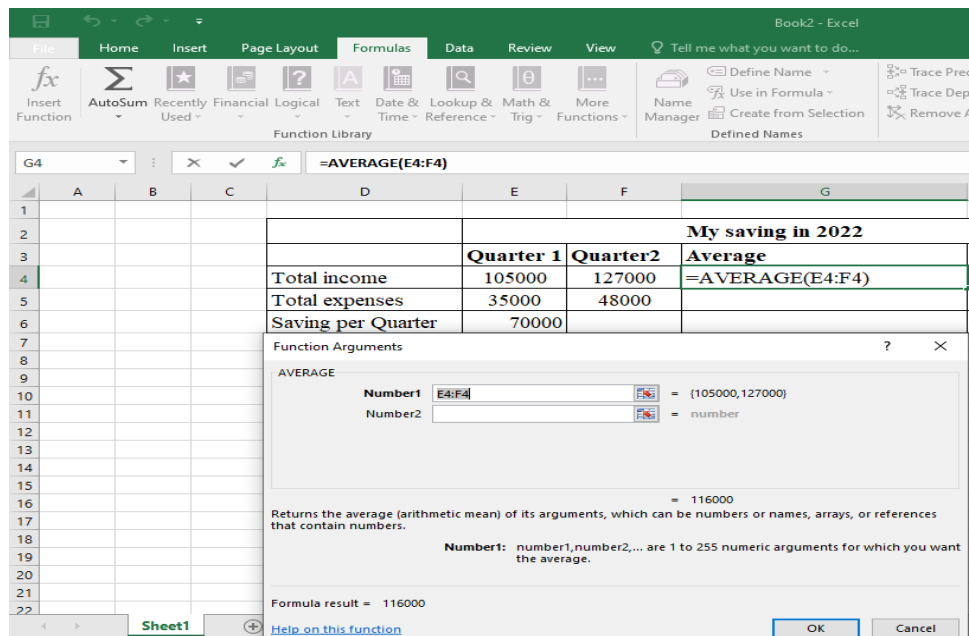
- e. Click the **Insert Function** button



- f. Select **the function of your choice** from the list



- g. The Function Arguments dialog opens with function arguments selected with the cell ranges.



- h. Finally, click at **OK** to get the result in indicated cell

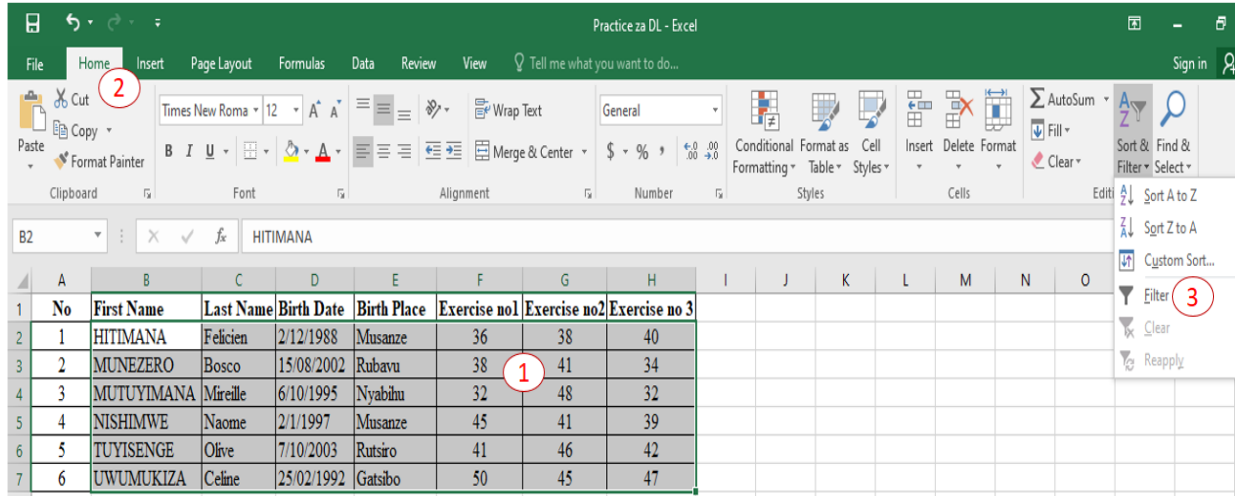
3.2.2. Data sorting and filtering

Sorting lets you put data in various sequences, such as alphabetical order or grouping all of the rows of data related while filtering creates a smaller subset of the data while hiding the rest of the dataset.

In the Data tab, go to the Sort & Filter group. To sort values based on Excel's interpretation of the column.

1. Select data to be sorted
2. Click the **home menu**

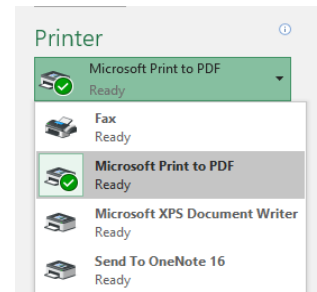
3. Click **sort and filter menu** at the top right corner
4. Then choose **A to Z** for **ascending order** or Sort **Z to A** for **descending order** or choose **custom sort** to define your preference.



3.3. Printing worksheets

FILE

Print



Copies: 1



3.4. PRACTICE

Activity3: The following table shows the marks obtained from general test in one class

Create a folder on desktop and name it **ICT_DL**

Open MS Excel in your computer and enter data in the above table by starting from cell B2

Save the file in your ICT_DL folder and name it **Results of general test.**

Find the total marks of each student

Arrange average marks in Ascending order

MODULE 4: CREATE DIGITAL CONTENT WITH PRESENTATION

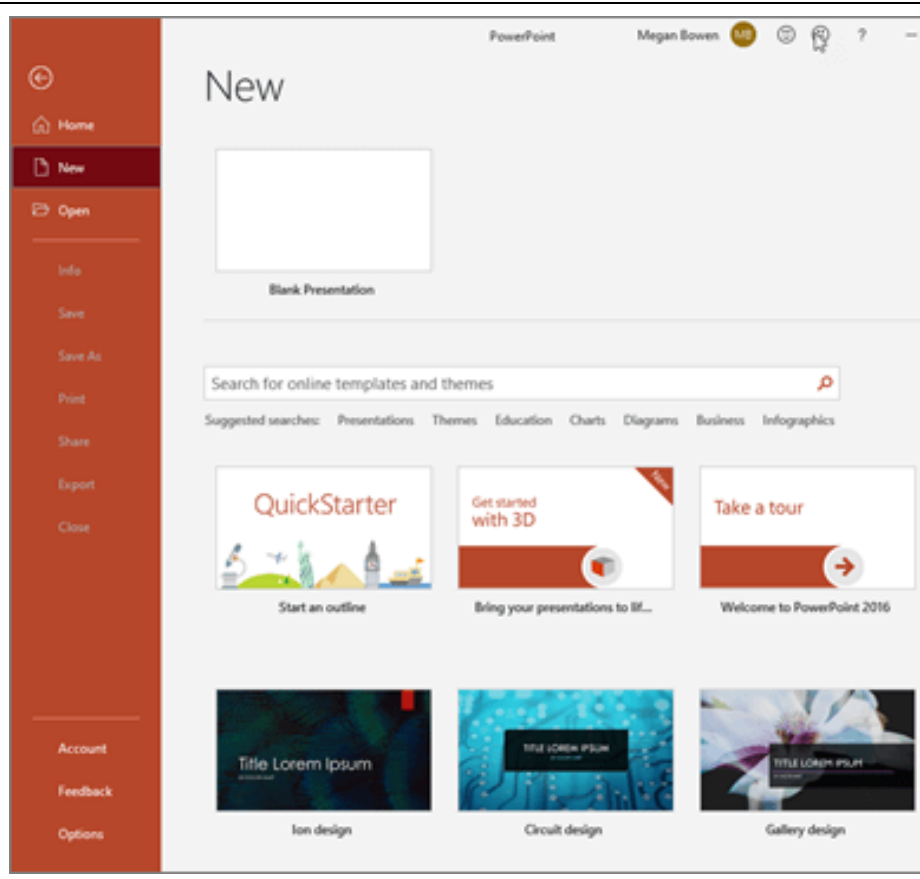
4.1: Exploring PowerPoint

PowerPoint (PPT) is a powerful, easy-to-use presentation graphics software program which allows you to create professional-looking electronic slide shows. PPT is used to present information in an organized manner to an individual or group. You can easily create a presentation that will impress your audience and convey your message clearly and professionally.

4.1.1 Create and manage presentation

Power point is one component for Microsoft Office.

From the list of installed programs into your computer, search where PowerPoint is located and click on it.

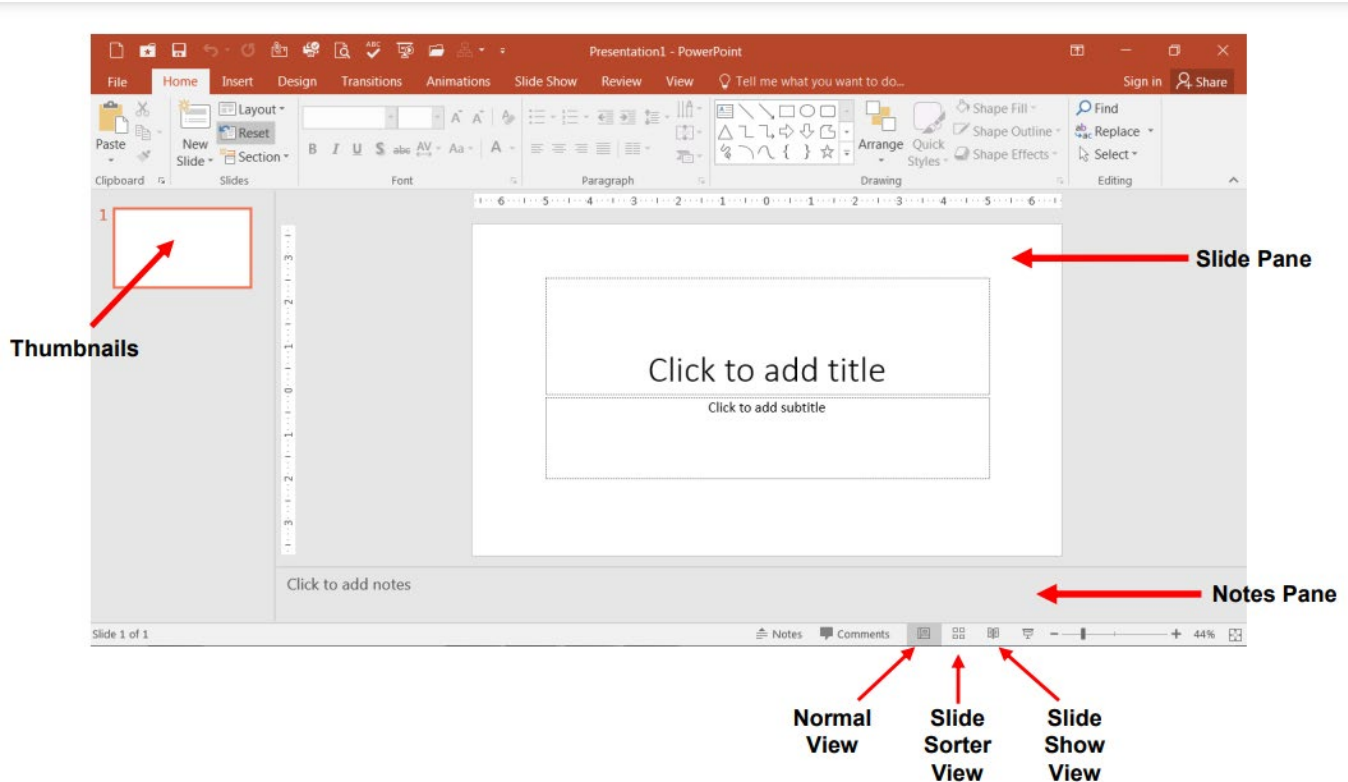
<p>Create a presentation</p> <ol style="list-style-type: none">1) Click on the File tab2) Click on New3) Select either a Blank Presentation,4) Double-click Blank Presentation to create a new presentation	
---	---

When you create a Blank Presentation in PowerPoint, the workspace opens in **Normal view**.

Normal view is divided into three main areas:

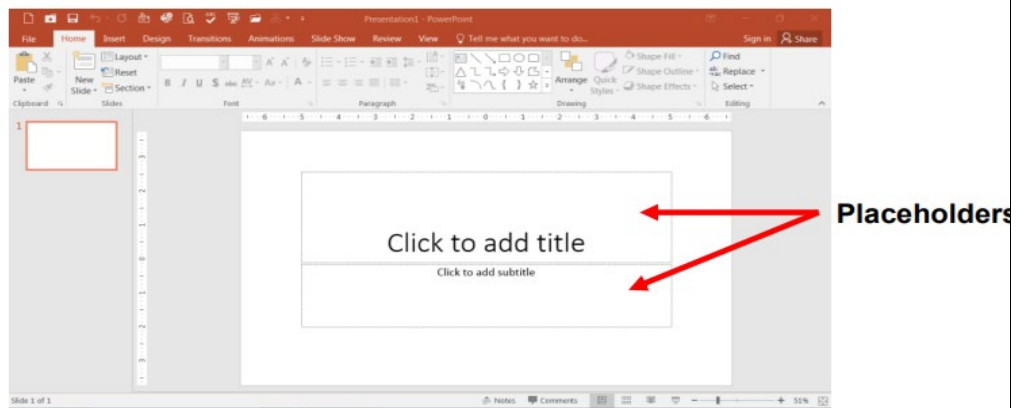
- 1) **Slide Pane** - shows the full layout of a slide
- 2) **Thumbnails** – shows slide thumbnails
- 3) **Notes Pane** – used to input text relevant to a specific slide

Other views include **Slide Sorter view** which shows thumbnails of the entire presentation and **Slide Show view** where you preview your presentation as your audience will see it.



Entering Text on a Slide

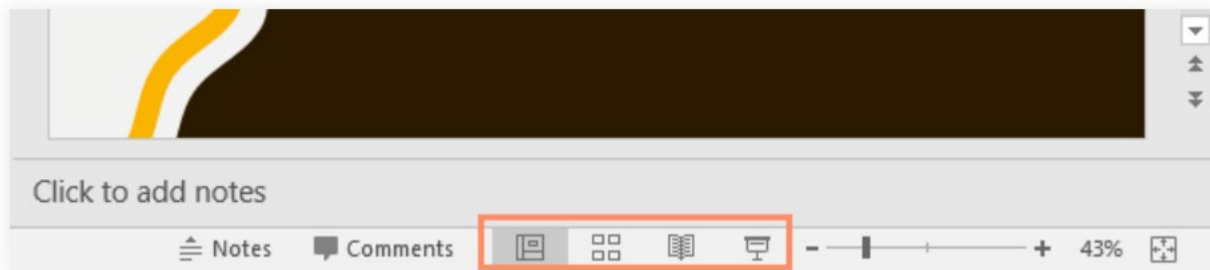
When you create a new presentation, the first slide to appear is a Title slide. It contains two placeholders: a title



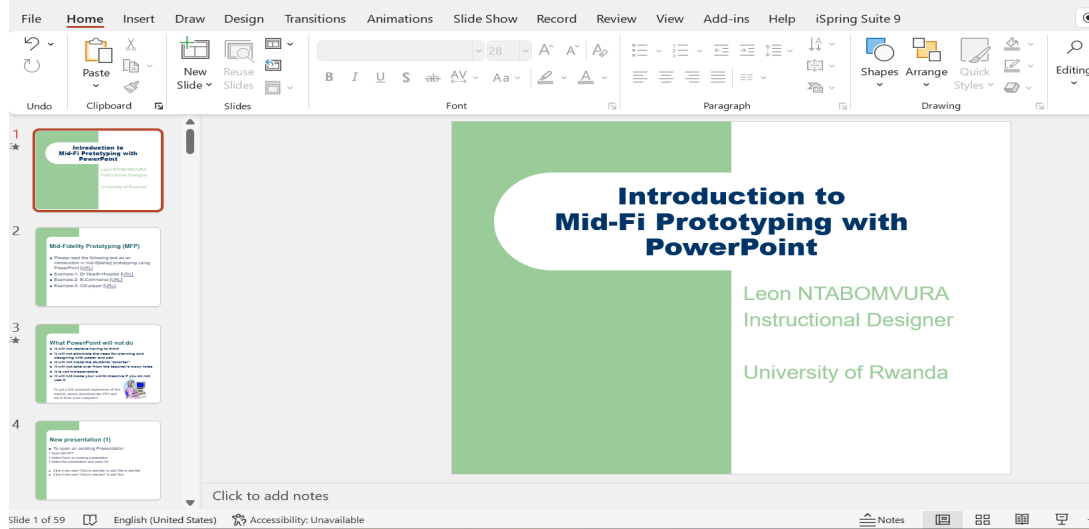
placeholder and a subtitle placeholder. To add text, click within the placeholder and type

4.1.2 Managing slides

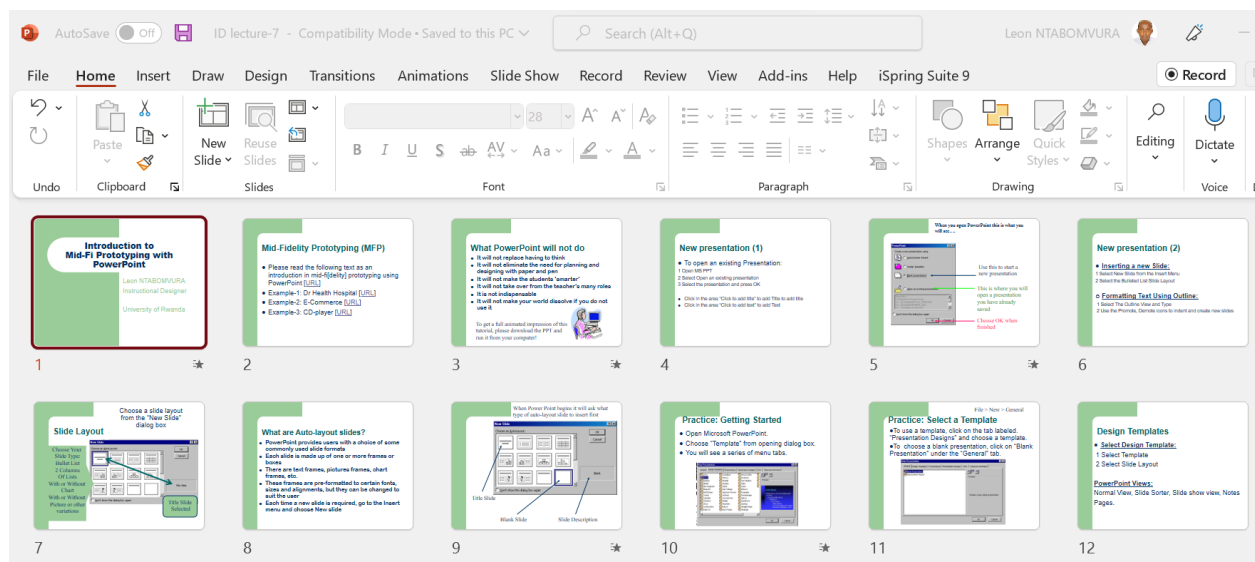
PowerPoint includes several different **slide views**, which are all useful for various tasks. The **slide view commands** are located in the bottom-right of the PowerPoint window. There are four main slide views.



- Normal view: This is the default view, where you create and edit slides. You can also move slides in the Slide Navigation pane on the left.



- Slide sorter view: In this view, you'll see a thumbnail version of each slide. You can drag and drop slides to reorder them quickly.



- Slide show view: This is the view you'll use to present to an audience. This command will begin the presentation from the current slide.

What PowerPoint will not do

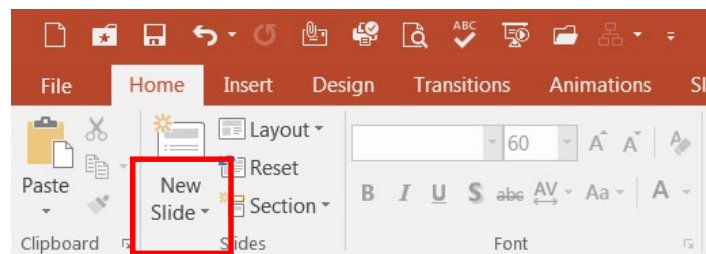
- It will not replace having to think
- It will not eliminate the need for planning and designing with paper and pen
- It will not make the students 'smarter'
- It will not take over from the teacher's many roles
- It is not indispensable
- It will not make your world dissolve if you do not use it

To get a full animated impression of this tutorial, please download the PPT and run it from your computer!



To Add New Slides:

- 1) Click on the **Home** tab
- 2) Click on **New Slide** in the **Slides** group
- 3) Choose a slide layout



4.1.3 Formatting slide Text

Text is an indispensable element, so you should know all there is to make it appealing and useful for your audience.

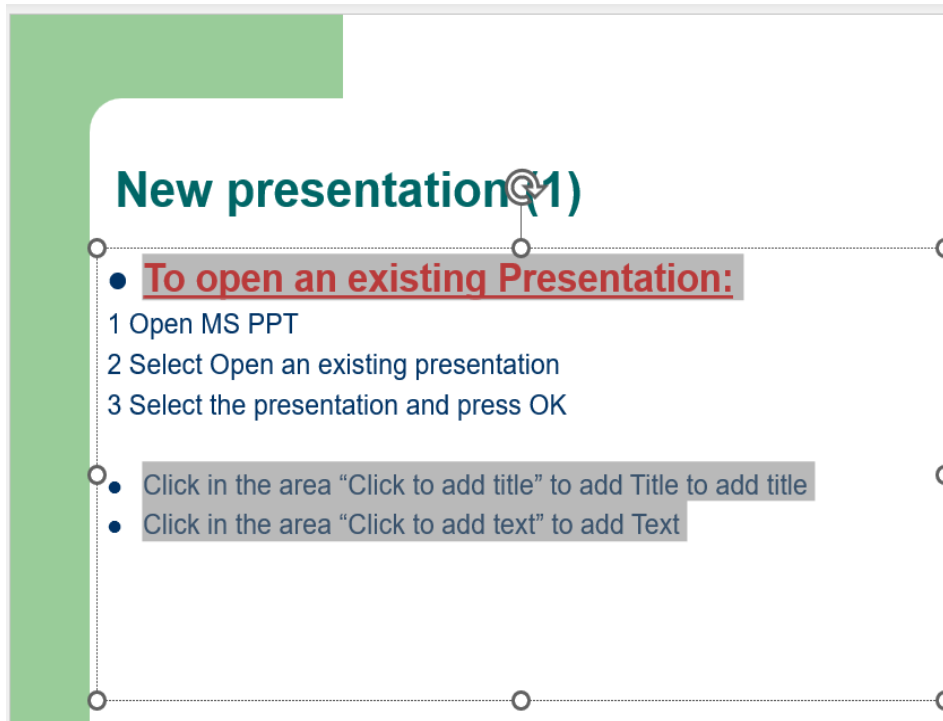
Format options include:

- **Font Color** - Choose a font color for your text.

- **Numbering or Bullets** - Create a list using numbers or bullets.
- **Add or Remove Columns** - Add or remove columns in your text.
- **Text Direction** - Change the direction of text.
- **Align Text** - Connect your text to the top, middle, or bottom of a bounding box.
- **Align Left, Center, Align Right, or Justify** - Align your text the way you want.
- **Increase List Level or Decrease List Level** - Increase or decrease a list indent.

To Format Text:

- 1) Click within the placeholder
- 2) Select the text to format
- 3) Click on the **Home** tab
- 4) Click on the formatting buttons in either the **Font** or **Paragraph** groups
- 5) You can also use the **Mini Tool Bar** that appears when the text is selected



4.2. Adding special effects

You can animate the text, pictures, shapes, tables, SmartArt graphics, and other objects in your PowerPoint presentation. Effects can make an object appear, disappear, or move. They can change an object's size or color. There's also a related video about animating text.

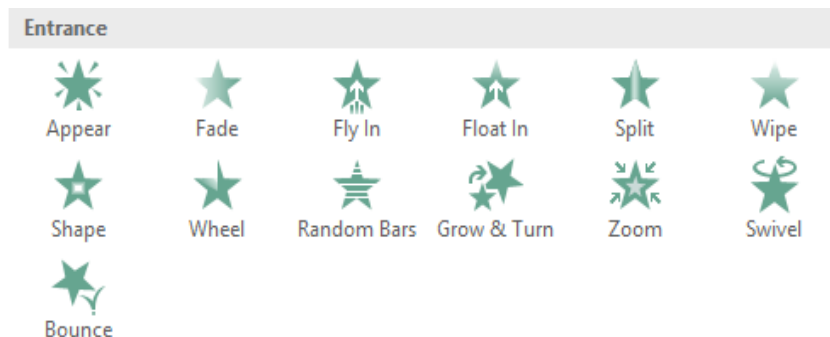
4.2.1 Animate text and picture in slides

In PowerPoint, you can **animate** text and objects like clip art, shapes, and pictures. Animation—or movement—on the slide can be used to **draw the audience's attention** to specific content or to make the slide easier to read.

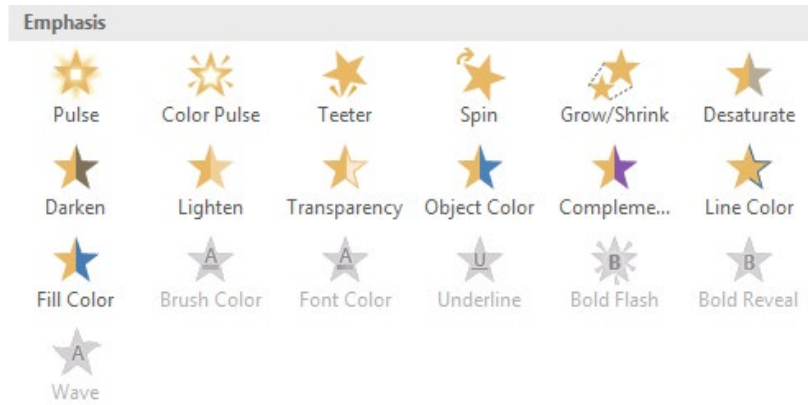
The four types of animations

There are several animation effect you can choose from, and they are organized into four types.

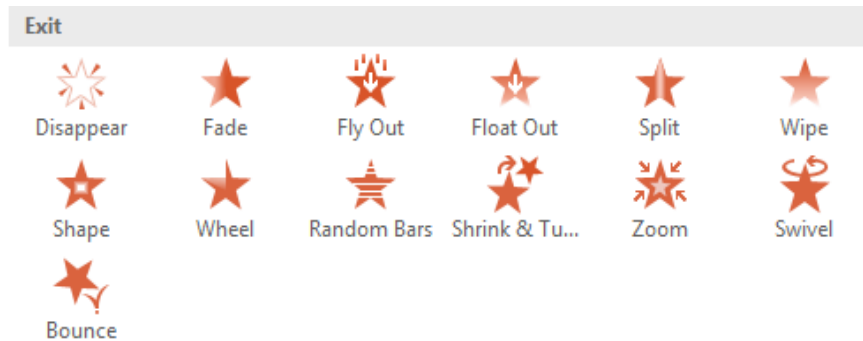
- Entrance: This controls how the object enters the slide. For example, with the Bounce animation the object will drop onto the slide and then bounce several times.



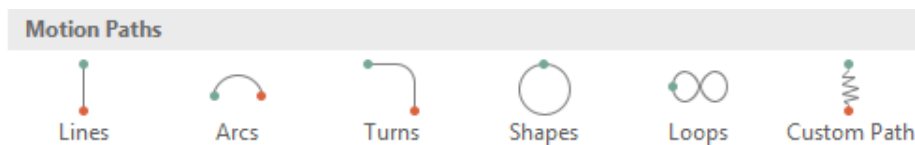
- Emphasis: These animations occur while the object is on the slide, often triggered by a mouse click. For example, you can set an object to spin when you click the mouse.



- Exit: These control how the object exits the slide. For example, with the Fade animation the object will simply fade away.

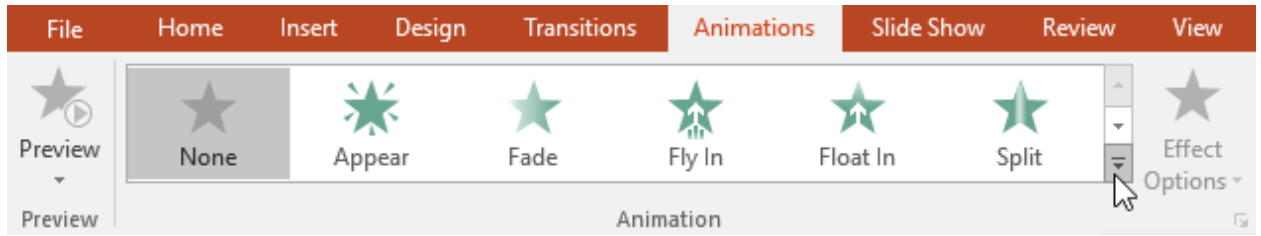


- Motion Paths: These are similar to Emphasis effects, except the object moves within the slide along a predetermined path, like a circle.

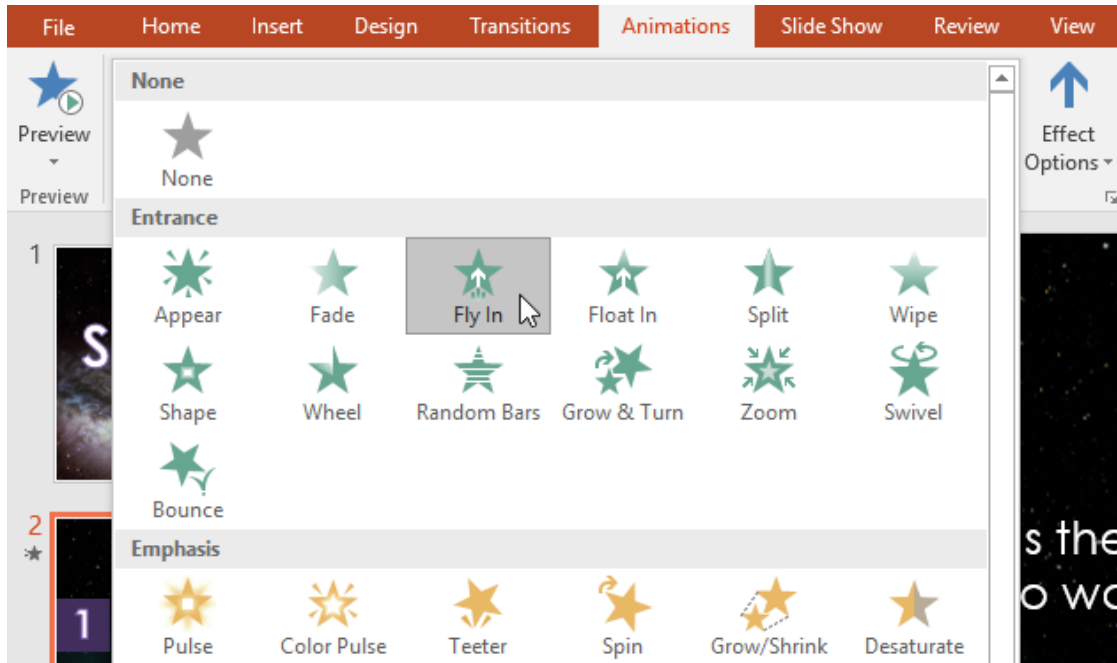


To apply an animation to an object:

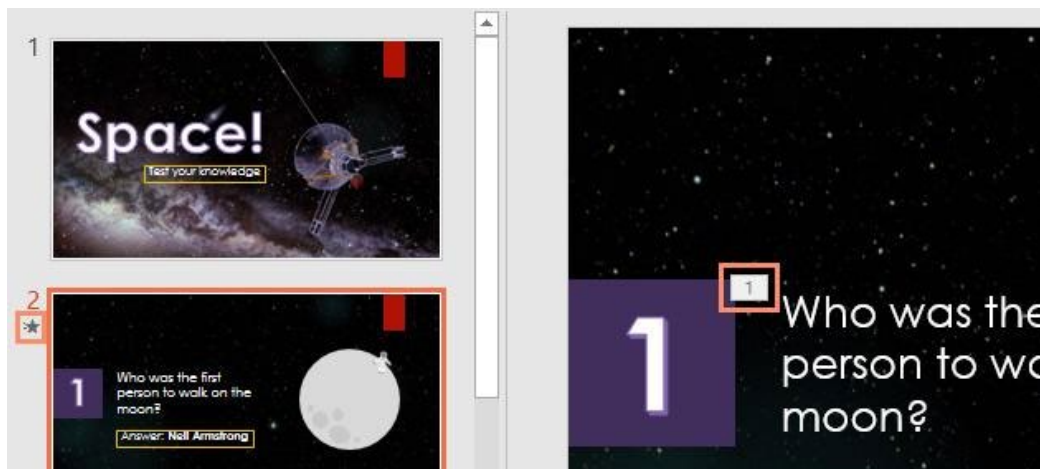
1. Select the object you want to animate.
2. On the Animations tab, click the More drop-down arrow in the Animation group.



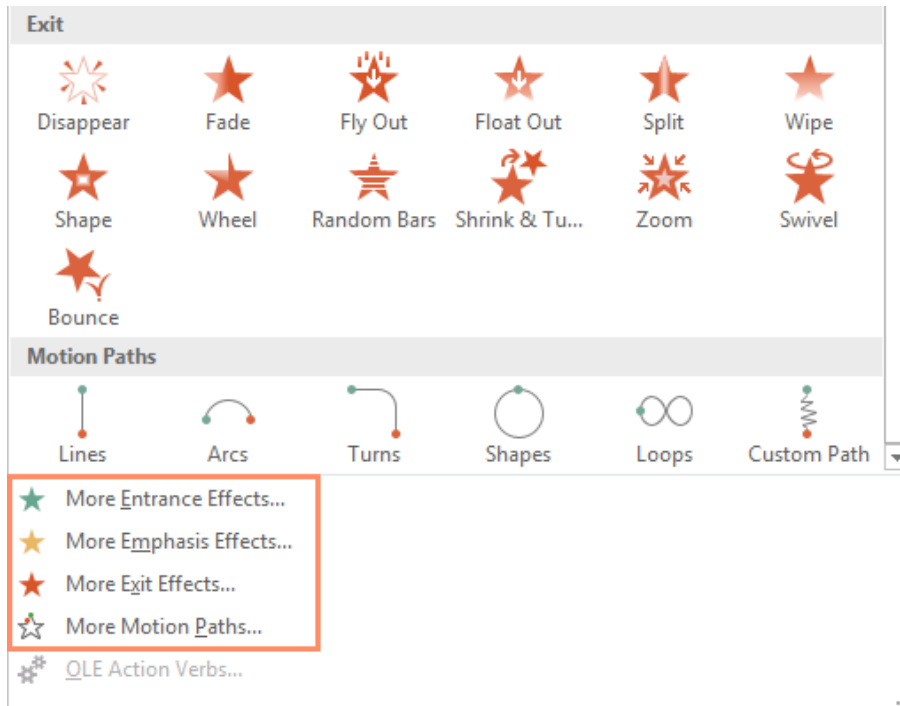
3. A drop-down menu of animation effects will appear. Select the desired effect.



4. The effect will apply to the object. The object will have a small number next to it to show that it has an animation. In the Slide pane, a star symbol also will appear next to the slide.

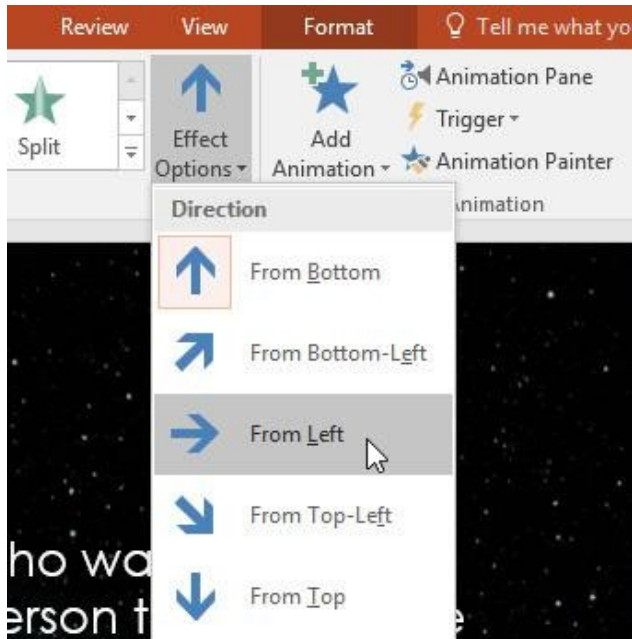


At the bottom of the menu, you can access additional effects.



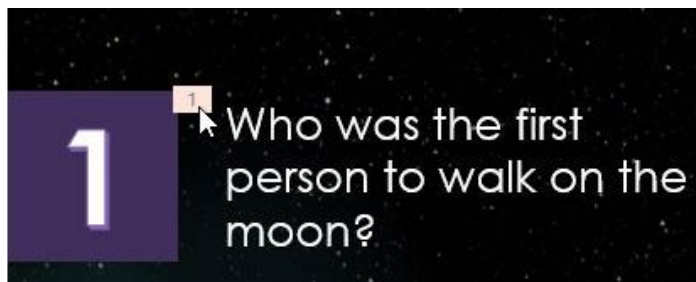
Effect options

Some effects will have options you can change. For example, with the Fly In effect you can control which direction the object comes from. These options can be accessed from the Effect Options command in the Animation group.



To remove an animation:

1. Select the small number located next to the animated object.



2. Press the Delete key. The animation will be deleted.

Animations are best used in moderation. Adding too many animations can make your presentation look unprofessional and can even be distracting to your audience. Consider using subtle animations, or not using them at all.

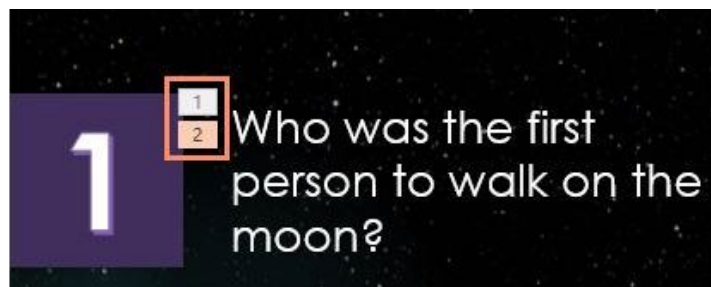
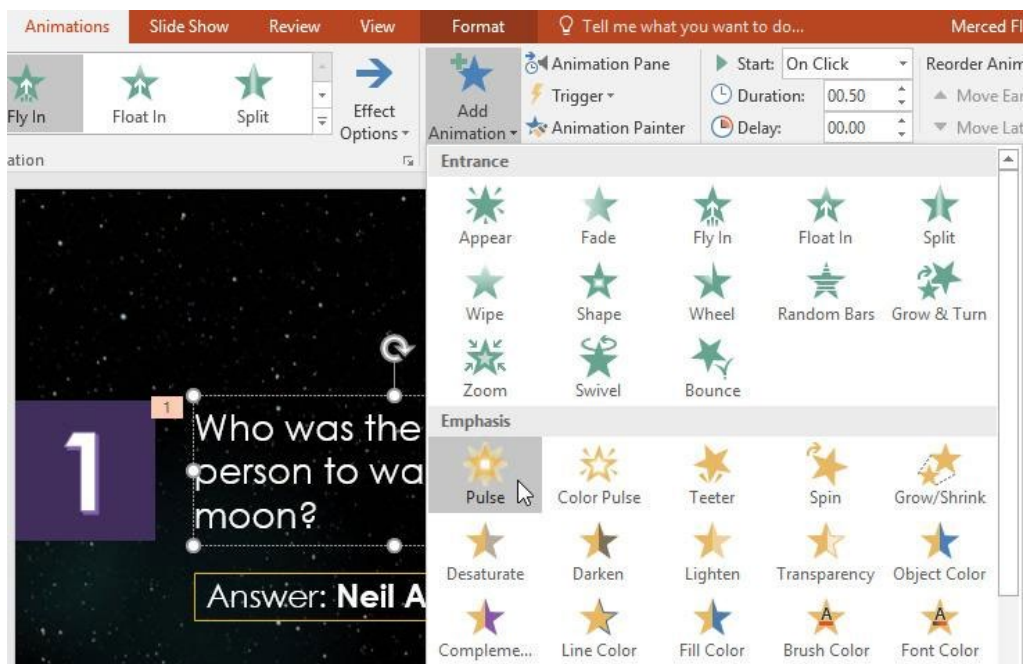
Working with animations

To add multiple animations to an object:

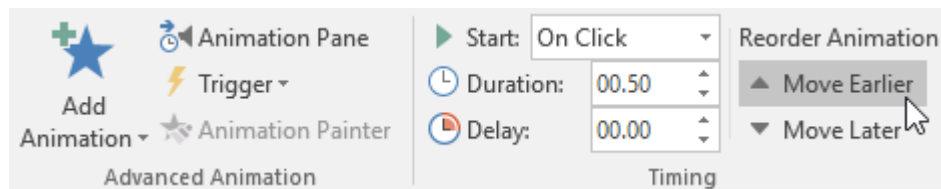
If you select a new animation from the the menu in the Animation group, it will replace the object's current animation. However, you'll sometimes want to place more than one animation on an object,

like Entrance and Exit effects. To do this, you'll need to use the Add Animation command, which will allow you to keep your current animations while adding new ones.

1. Select an object.
2. Click the Animations tab.
3. In the Advanced Animation group, click the Add Animation command to view the available animations.



To reorder the animations:

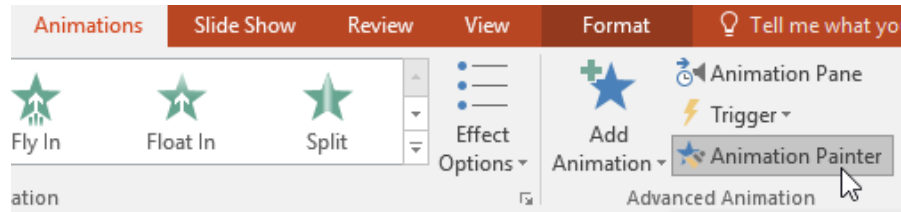


To copy animations with the Animation Painter:

In some cases, you may want to apply the same effects to more than one object. You can do this by copying the effects from one object to another using the Animation Painter. In our example, we want to copy an animation from one slide to another because they have similar layouts.



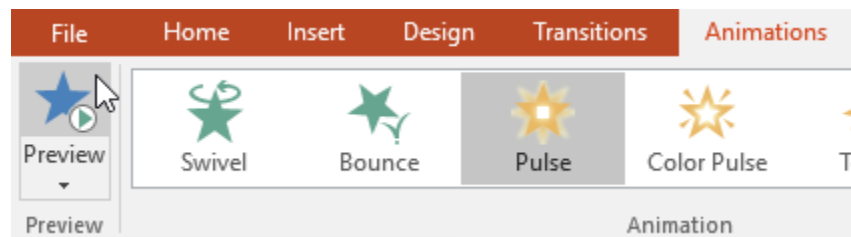
2. From the Animations tab, click the Animation Painter command.

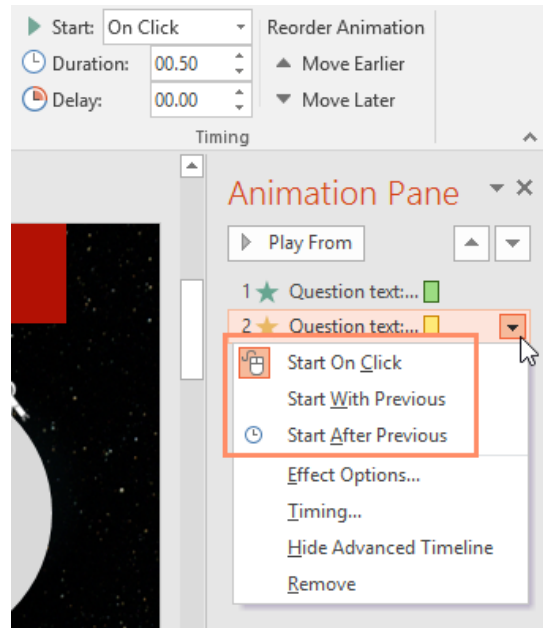


To preview animations:

Any animation effects you have applied will show up when you play the slide show. However, you can also quickly preview the animations for the current slide without viewing the slide show.

1. Navigate to the slide you want to preview.





When you preview the animations, all the effects will play through automatically. To test effects that are set to Start on Click, you will need to play the slide show.

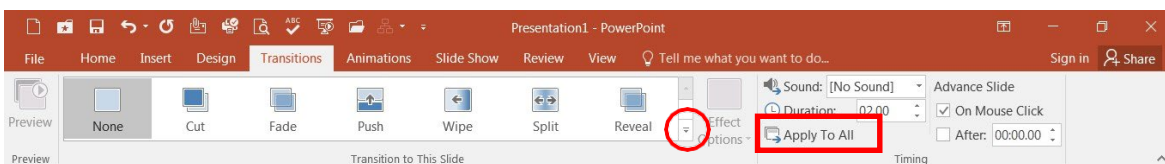
4.2.2 Slides transition

Slide transitions are the animation-like effects that happen when you move from one slide to the next during a presentation. Add slide transitions to bring your PowerPoint presentation to life.

1. Select the slide you want to add a transition to.
2. Select the **Transitions** tab and choose a transition. Select a transition to see a preview.
3. Select **Effect Options** to choose the direction and nature of the transition.

Note: Not every transition has **Effect Options**.

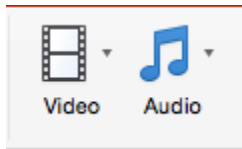
4. Select **Preview** to see what the transition looks like.
5. To remove a transition, select **Transitions** > **None**.



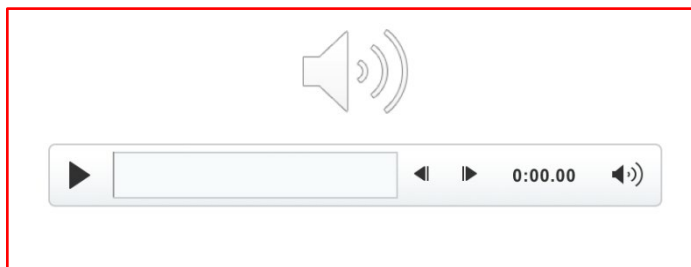
4.2.3 Add audio and video content to slides

While how you insert a movie or sound file is similar to inserting a picture (go to the Insert Ribbon and click on the Video or Audio icon)

Here are the steps:



Step 2. Navigate to the correct clip, and click the OK button.



4.3. Preparing output

By completing the preparation of your slides, the output will be presented to audience or will be printed on papers.

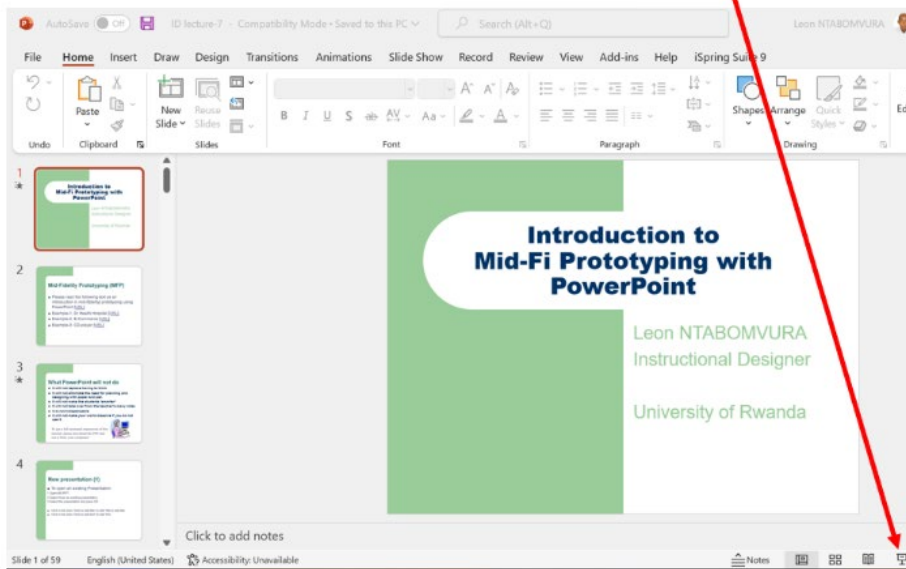
4.3.1 Presenting the prepare slides to audience

The purpose of PowerPoint is to act as a visual aid as a presenter goes along presenting their option, ideas, sales pitch, etc.

Steps to present slides to audience

Step 1: Connect your computer with projector

Step 2: Open your PowerPoint file, show the slide to start with, click on **Slide show** icon



Step 3: Use your computer arrows to present the next slides

4.3.2 Printing slides

You can print the entire presentation, only print the selected slides, only print the current slide and or enter specific slides to print.

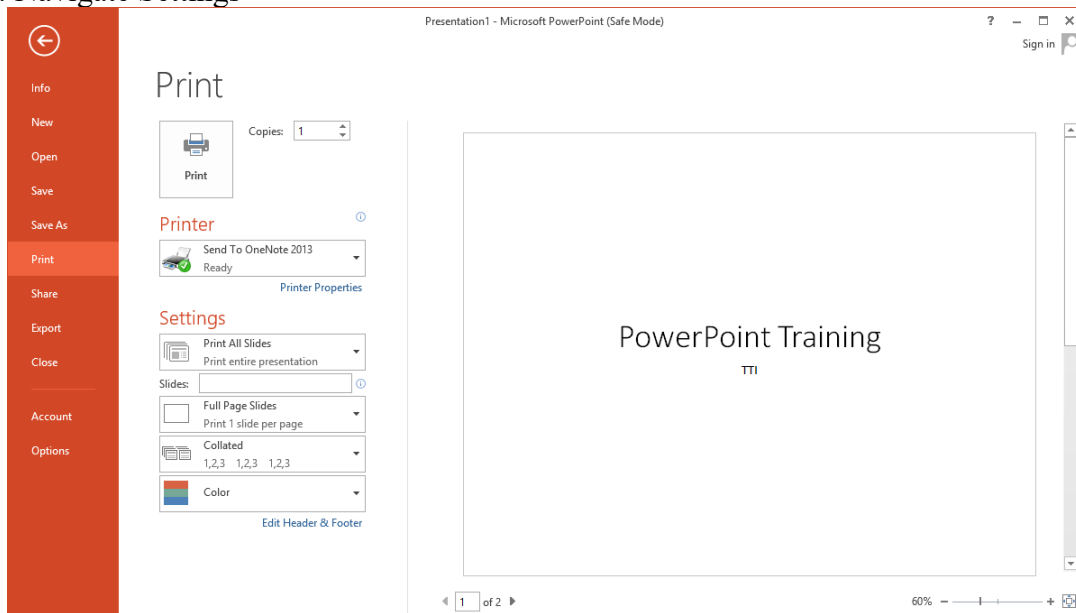
Steps to print slides:

Step 1: Click on the File tab

Step 2: Click on Print

Step 3: Choose the Printer connected

Step 4: Navigate Settings



Under Settings click on Print All Slides and select one of the options to print:

- **Print All Slides** – print entire presentation
- **Print Selection** – only print the selected slides
- **Print Current Slide** – only print the current slide
- **Custom Range** – enter specific slides to print

Step 5: Choose number of required copies

Step 6: Click on Print

Activity 4

Practice on Presentation

Discuss the importance of Power point program in teaching and learning and prepare at least 10 slides to present in our audience

With the first slide selected, apply a **Push** transition

Change the **Duration** to 4.00.

Use the **Apply to All** command to apply your changes to every slide.

Using the **Slide Show** button at the bottom of your window, play your slideshow and make sure each slide should advance automatically.

Introduce your school to public

Create a Public presentation introducing your school to public in which

You give the full address of it

Describe ICT facilities available at your school, and mention how you want to improve them

The presentation should contain animations and transitions

The presentation should contain at least 2 pictures taken from your school

Save the presentation on the desktop of your computer under **DL_Your full name**

MODULE 5: ACCESS INFORMATION ONLINE, COMMUNICATE ONLINE AND SOCIAL MEDIA IN WORKPLACE

This module introduces the broad meaning and steps of communicating online, accessing online information and using different social media in our daily life.

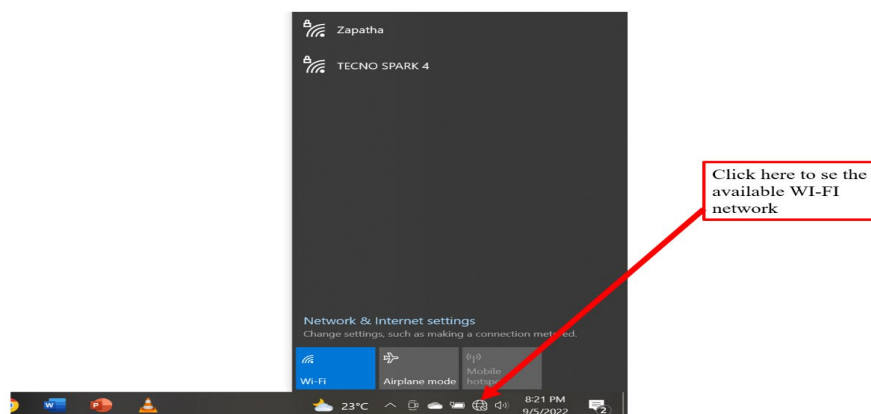
5.1 Access information online

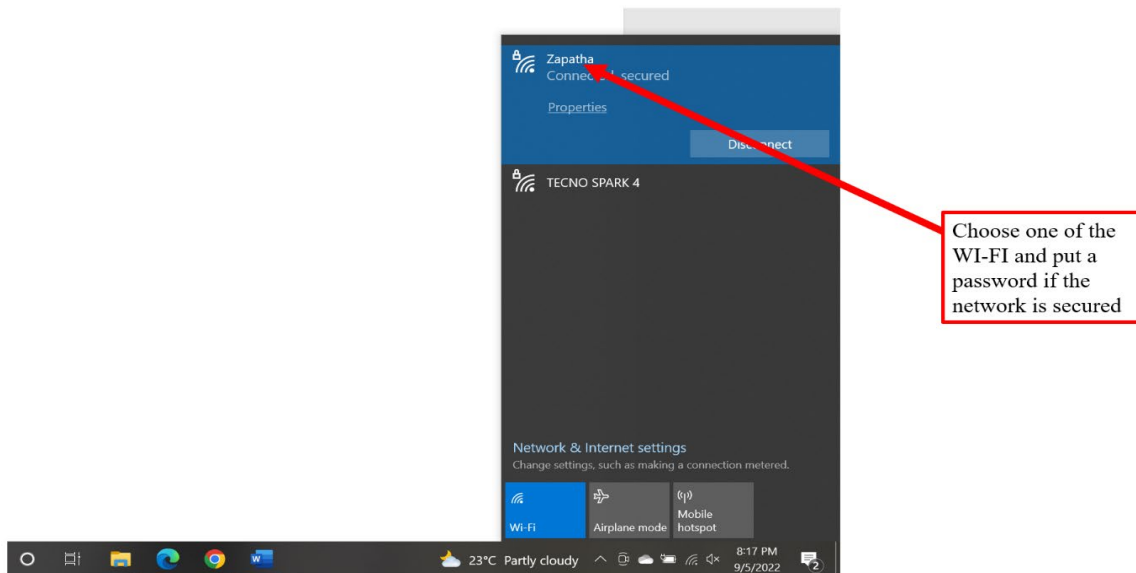
5.1.1 Connecting to the internet

The Internet (or internet) is the global system of interconnected computer networks that uses the Internet protocol suite (TCP/IP) to communicate between networks and devices. It is a network of networks that consists of private, public, academic, business, and government networks of local to global scope, linked by a broad array of electronic, wireless, and optical networking technologies. The Internet carries a vast range of information resources and services, such as the inter-linked hypertext documents and applications of the World Wide Web (WWW), electronic mail, telephony, and file sharing.

Once you've set up your computer, you may want to have Internet access so you can send and receive email, browse the Web, stream videos, and more. You may even want to set up a home wireless network, commonly known as Wi-Fi, so you can connect multiple devices to the Internet at the same time.

Internet Connection means a connection provided by an Internet Service Provider that enables individual computers or other hardware components, either individually or registered within a Local Area Network, to exchange Data over the public Internet. Let's now see how to manually add Wireless.





Now you are connected to the internet.

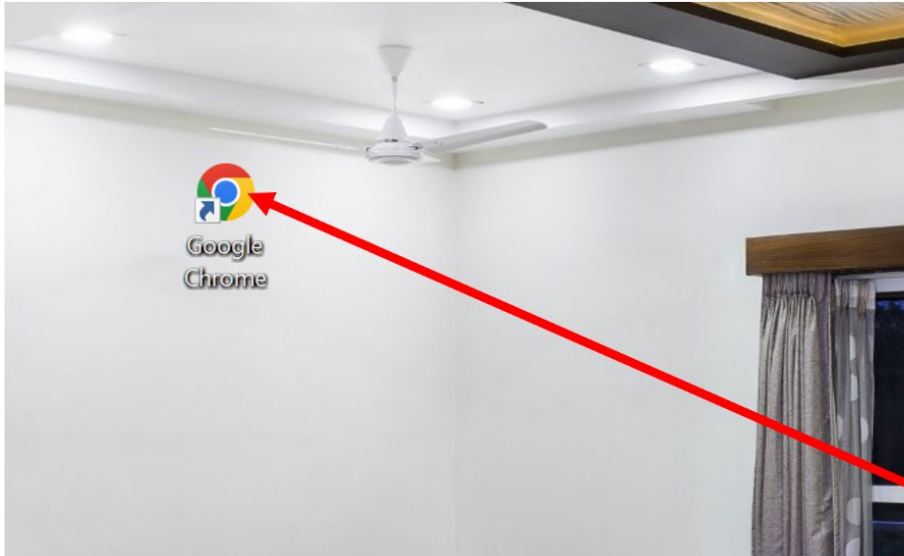
5.1.2. Web browser

A web browser (also referred to as an Internet browser or simply a browser) is application software for accessing the internet, it takes you anywhere on the internet. It retrieves information from other parts of the web and displays it on your desktop or mobile device. The information is transferred using the Hypertext Transfer Protocol, which defines how text, images and video are transmitted on the web.

Here are an examples of web browsers:

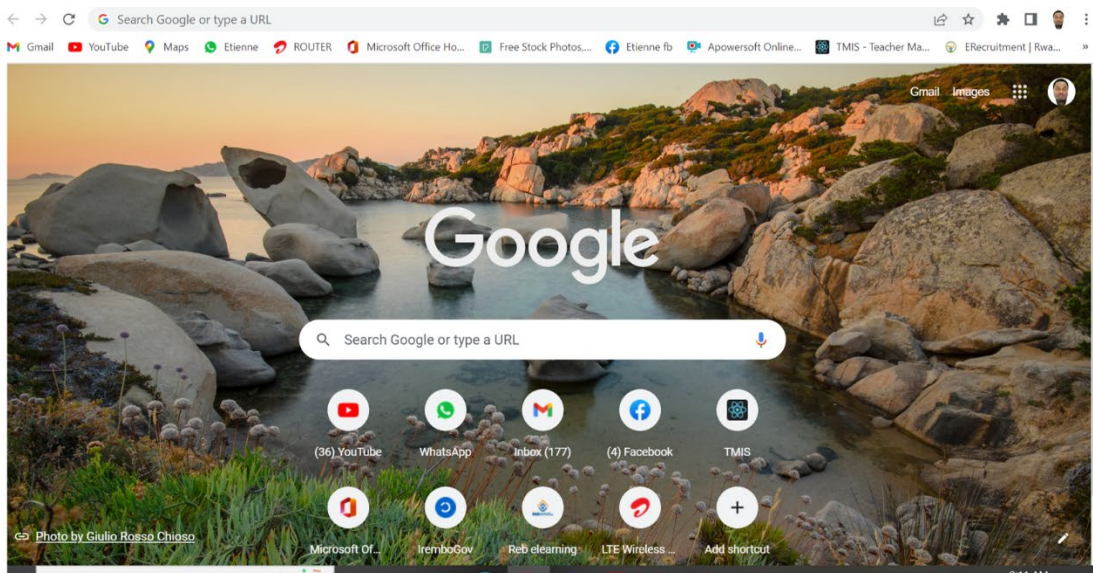


0



On your desktop
open any browser

Here down is what you get once your web browser is opened:

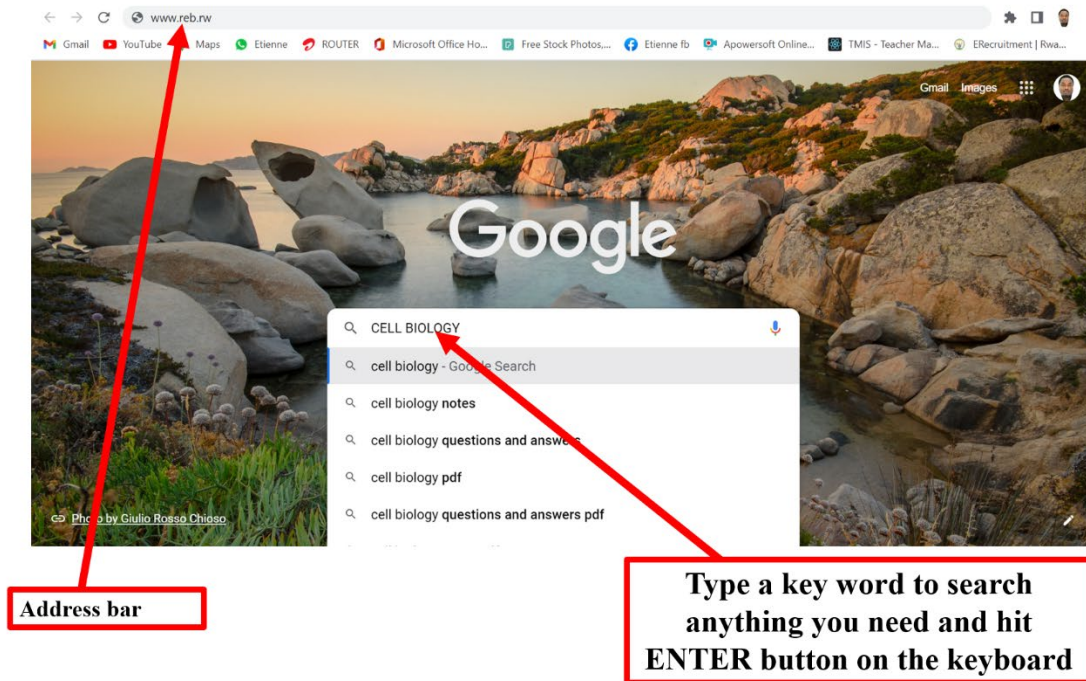


This is what you get once a
browser is opened

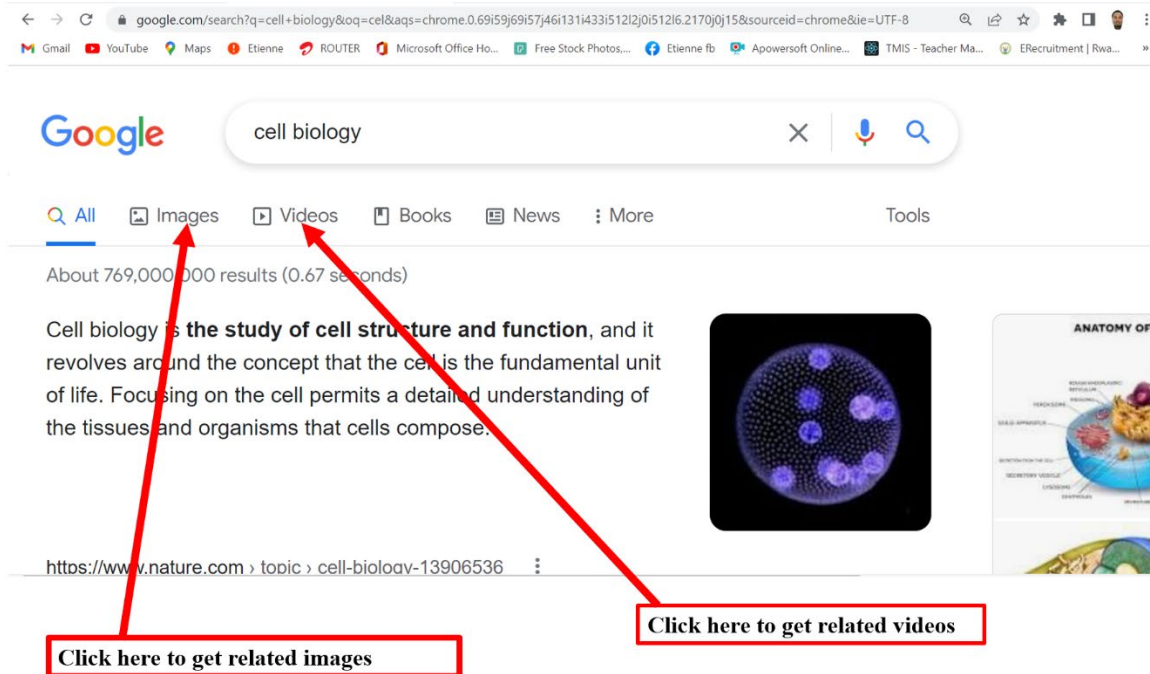
5.1.3 Search engines

A search engine is a website that allows users to look up information on the World Wide Web (WWW), part of the Internet. The search engine will achieve this by looking at many web pages to find matches to the user's search inputs. We can say that it is a web-based tool that enables users to locate information on the World Wide Web. Popular examples of search engines are Google, Yahoo!, Ask.com and MSN Search.

For example, if you want to search Cell in Biology you can do this

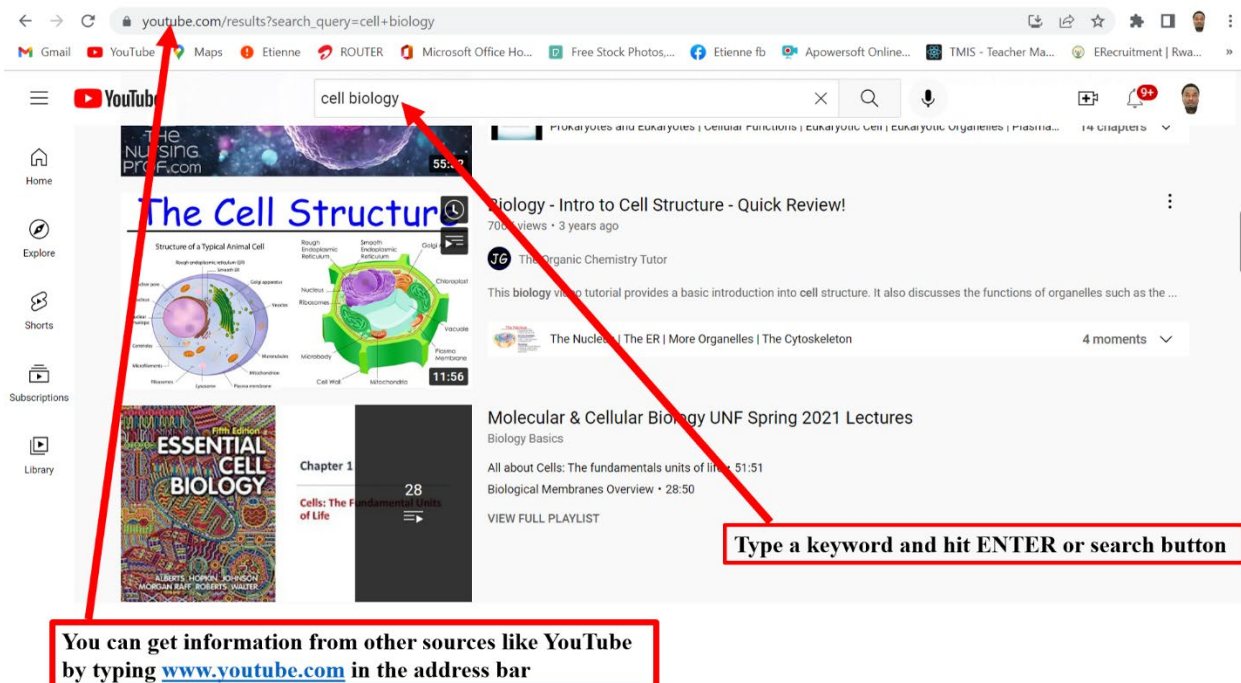


After pressing the Enter button on your keyboard you get different information, it is now up to you to choose which one best meets your search.



5.1.4 Searching information from different sources

We need to search information from different sources because knowing the kinds of information in each category of sources will help us to choose the right kind of information to meet each of our information needs. Some of those needs are very particular, we may need sounds, videos, text, etc..



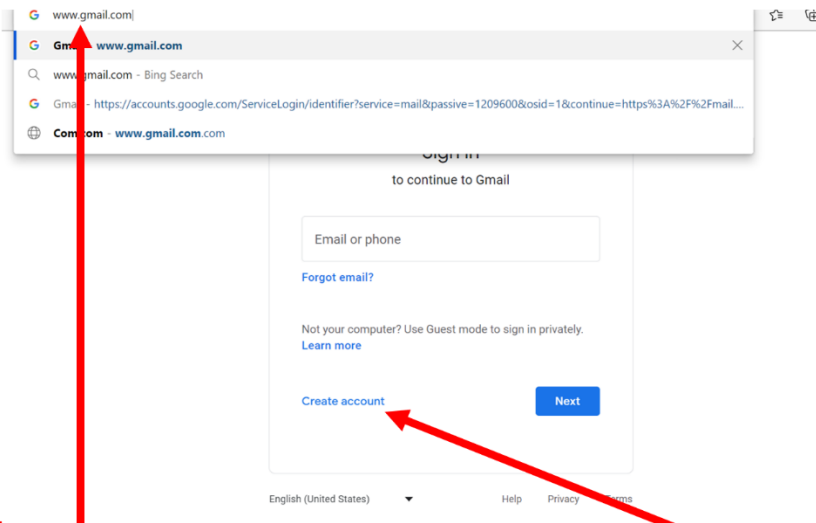
5.2. Communicate online (Gmail account)

Online communication refers to the ways in which individuals as well as computers can communicate with each other over a computer network, such as the Internet. These ways include: chat rooms and e-mail.

5.2.1. Create Gmail account

Gmail is free to sign up for and use, and has no hidden fees. There is no limit to how many emails you can send or receive, the number of people you can contact, or how much time you can spend using it. Gmail has some features you can purchase, but they do not drastically change user experience. Let us now start by creating a Gmail account.

Then after you will get this:



The image shows a browser window displaying the Gmail sign-in page. The address bar contains 'www.gmail.com'. Below the address bar, there is a search bar with 'Gmail' entered. The main content area features a sign-in form with a text input field for 'Email or phone', a 'Forgot email?' link, and a 'Next' button. A 'Create account' link is located below the sign-in form. Two red arrows point from text boxes to the 'Create account' link and the address bar. The first text box, labeled '1', instructs the user to go to the address bar and type 'www.gmail.com' and hit the ENTER key. The second text box, labeled '2', instructs the user to click on the 'Create account' link.

Go to the address bar and type www.gmail.com and hit ENTER key on the keyboard 1

Click here to create an account 2

You will be prompted with boxes to fill in information to complete the account creation.

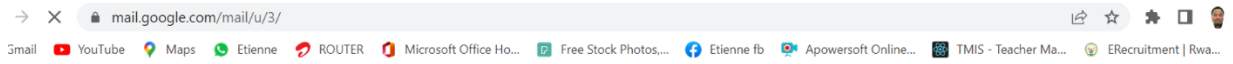
Type to fill correctly in the boxes and remember to create a strong password then click on next

Next step:

Type in the above boxes to put your birth date information

Type your phone number here

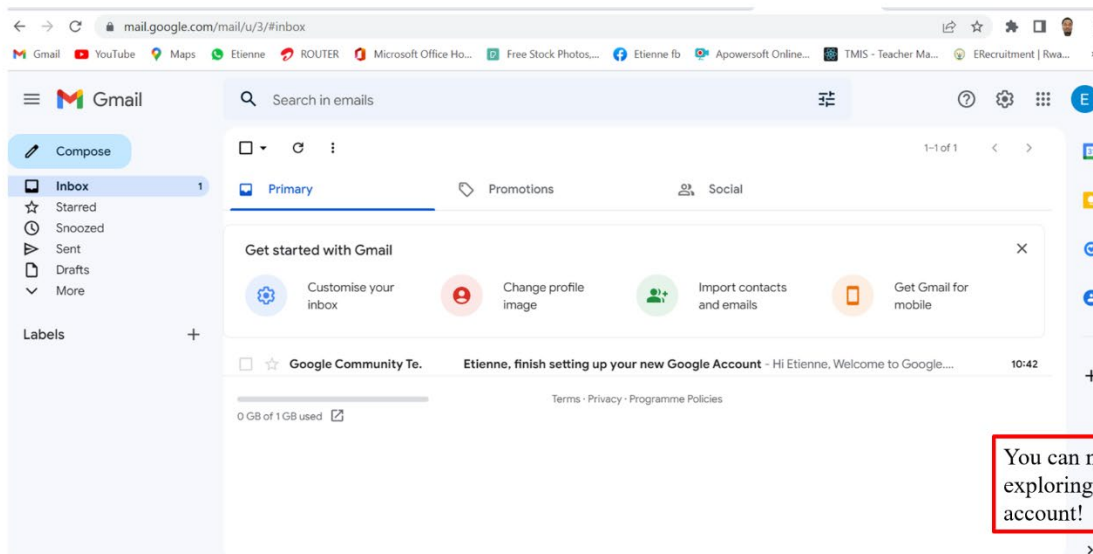
Scroll down to agree with the terms and regulations. Then, click on the continue button to proceed.



Google Workspace

Now, google is taking you to your account 😄

You are now done with creating your Gmail account.

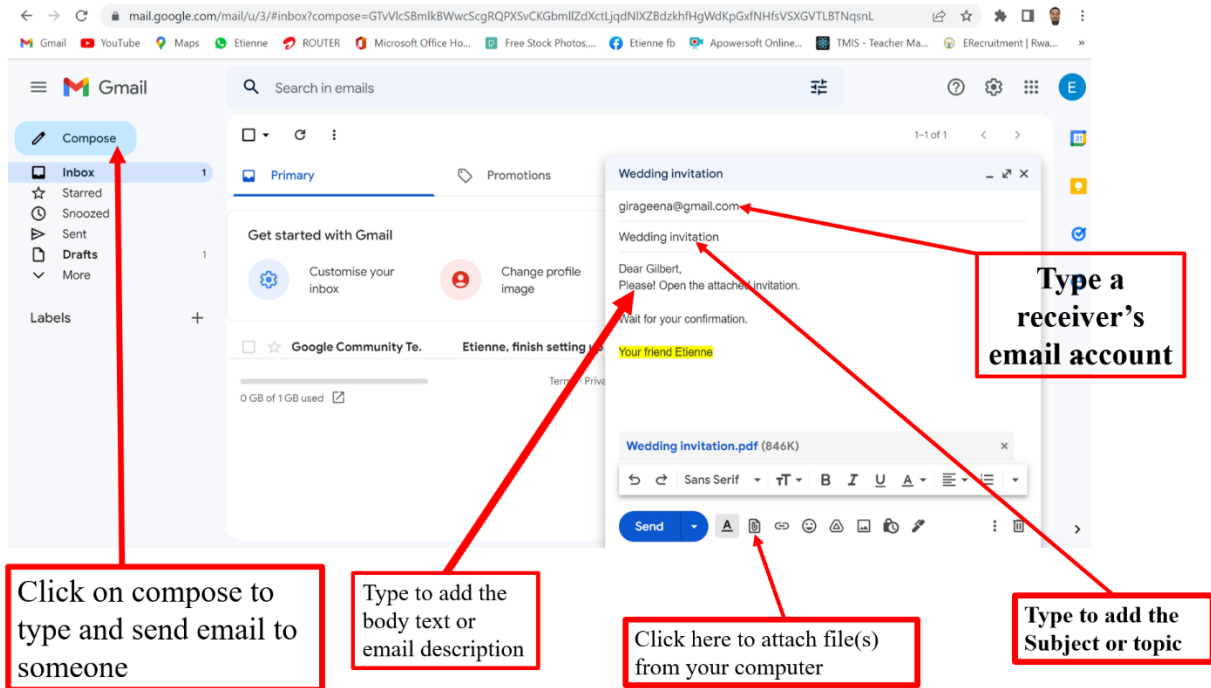


You can now start exploring your account!

Wow!!! Just smile you are there 🤔 👍 and you are done with creating a Gmail account

5.2.2. Compose and send an email with attachment

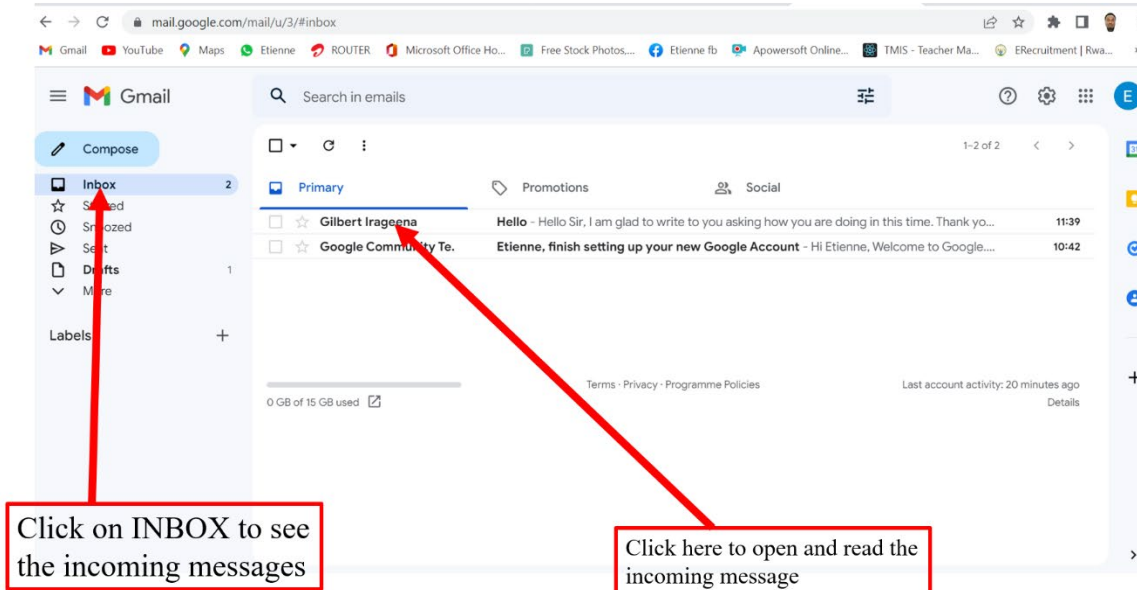
A process sends an email to a user and another process receives the email, by either sending a response to the sender, or writing it to a log in the console. This process contains Send Mail and Receive Mail



5.2.3. Read, reply and forward an email

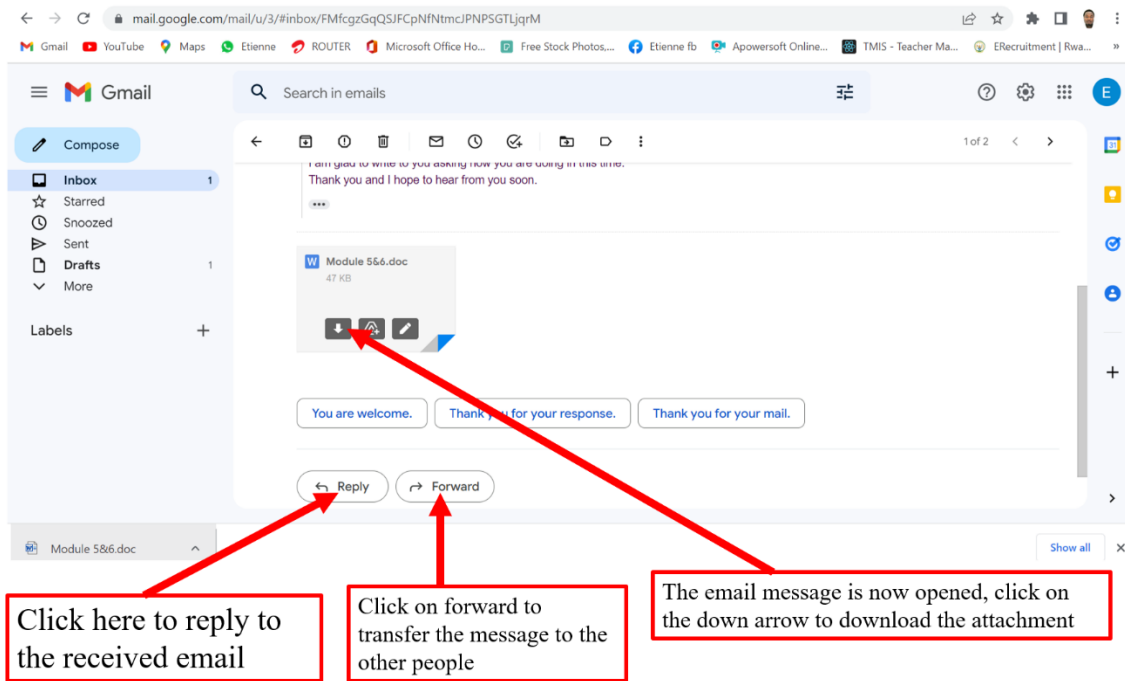
Reply all sends the new message to the original sender and all other recipients on the To and Cc lines. Attachments are not included. Forward allows you to type in a whole new set of recipients. Any attachments included in the original message are automatically included when you forward a message

Here you can read the received email as shown below:



Click on INBOX to see the incoming messages

Click here to open and read the incoming message



Click here to reply to the received email

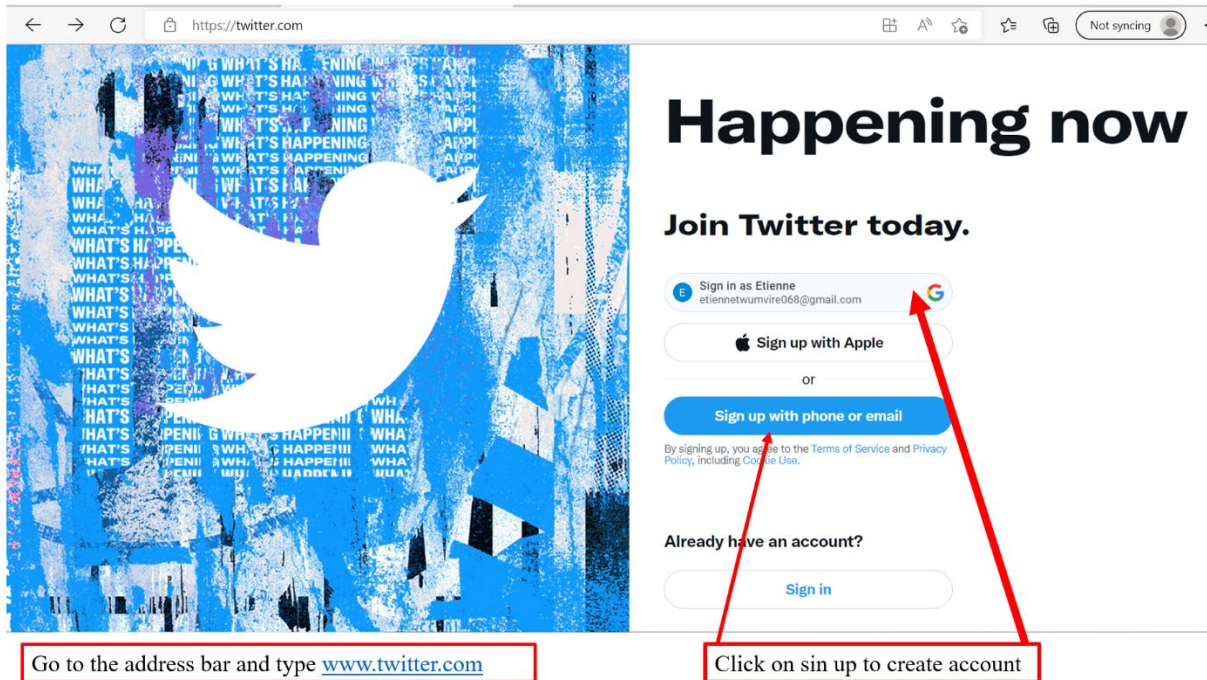
Click on forward to transfer the message to the other people

The email message is now opened, click on the down arrow to download the attachment

5.3. Social media in workplace (twitter and facebook)

Social media can be a powerful communication tool for employees, helping them to collaborate, share ideas and solve problems. Research has shown that 82% of employees think that social media can improve work relationships and 60% believe social media support decision-making processes.

5.3.1. Twitter

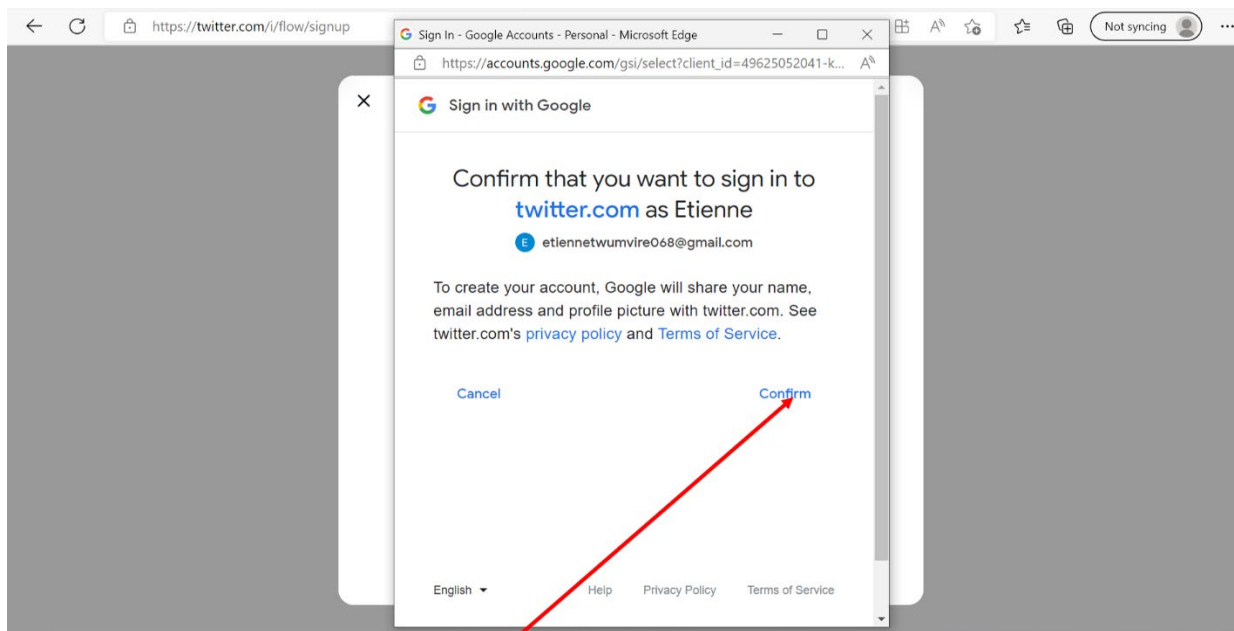
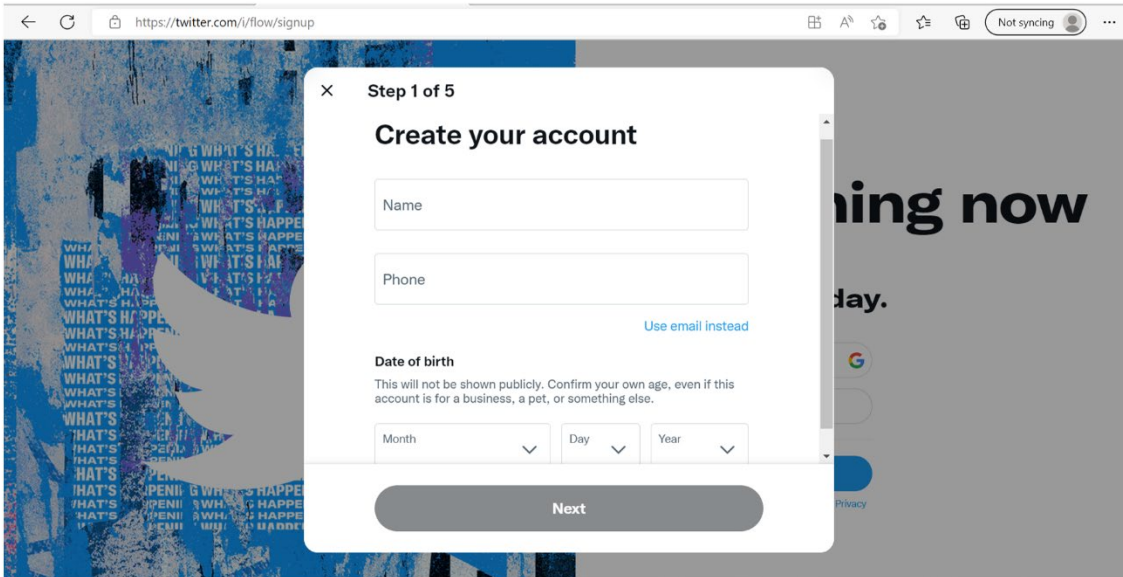


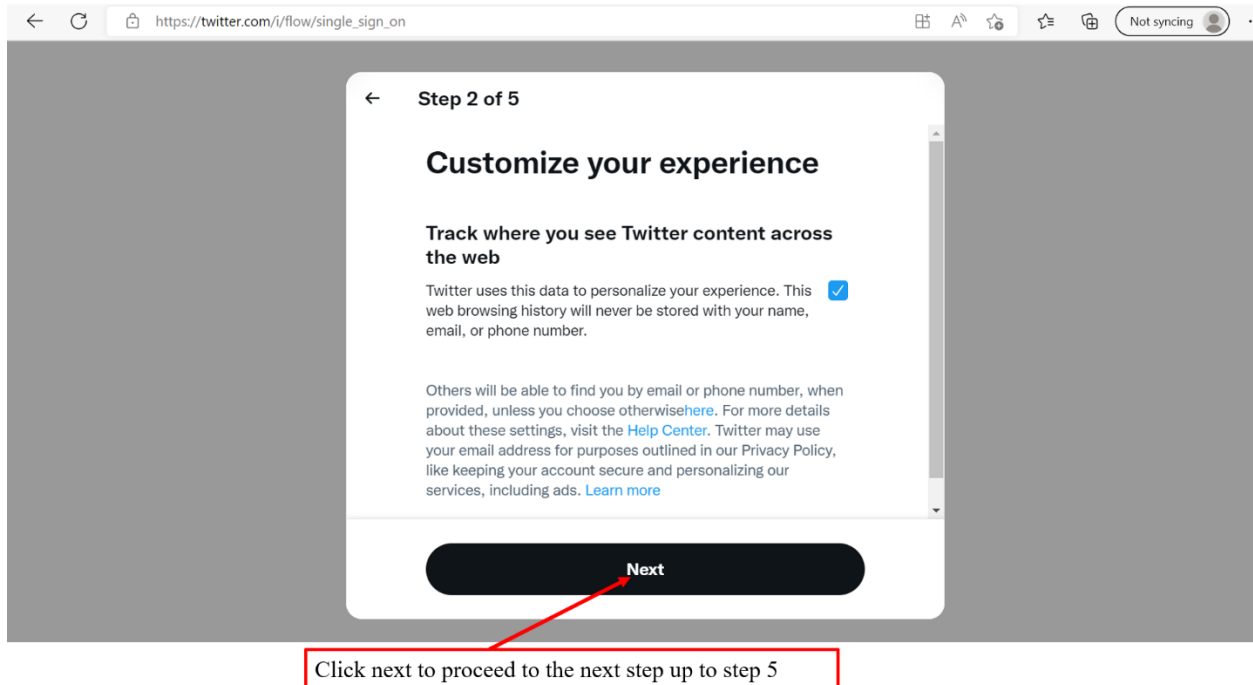
The image shows a browser window displaying the Twitter homepage. The address bar contains <https://twitter.com>. The main content area features a large white Twitter bird logo on a blue background with the text "Happening now" and "Join Twitter today." Below this, there are three primary sign-up options: "Sign in as Etienne" (with a Google icon), "Sign up with Apple", and "Sign up with phone or email". A "Sign in" button is also visible under the heading "Already have an account?". Two red arrows point to the "Sign in as Etienne" button and the "Sign up with phone or email" button. Two red boxes with text are positioned below the browser window: one pointing to the address bar and another pointing to the "Sign in as Etienne" button.

Go to the address bar and type [www.twitter.com](https://twitter.com)

Click on sin up to create account







Learning the Lingo

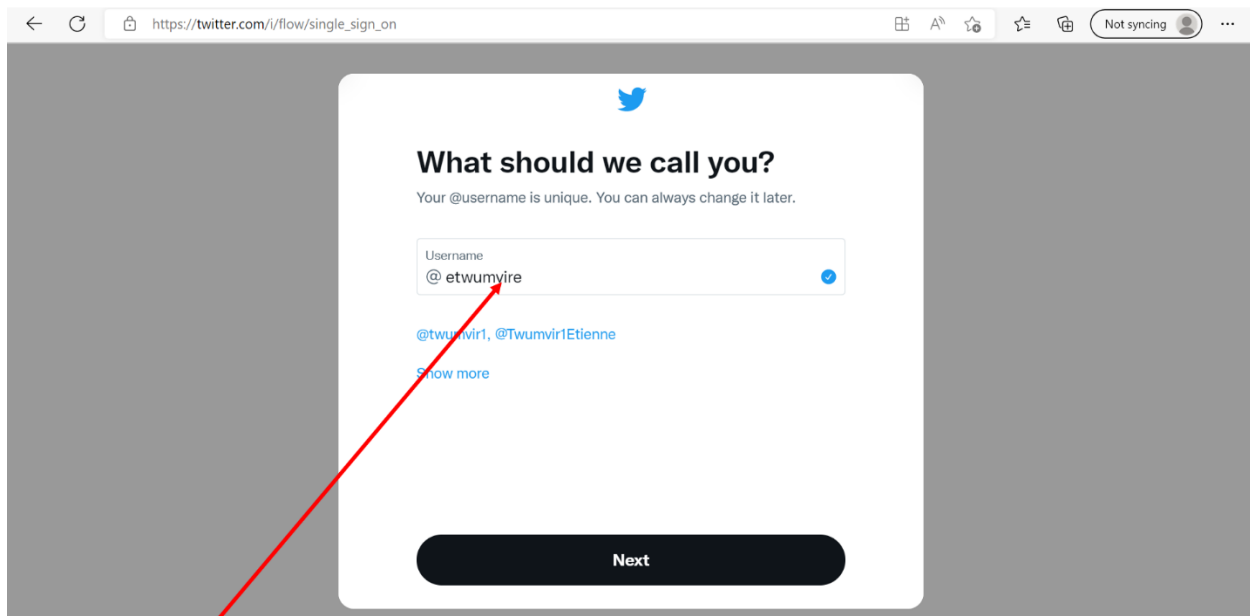
Twitter has a language of its own. Here are the terms you need to know!

- **DM/Direct Message:** A private note between two users on Twitter. The person receiving the message must follow the person sending it and the message is bound by the 140-character limit.
- **Follow:** The act of connecting with someone on Twitter. People who have elected to follow you will see your tweets in their timeline. You are not obligated to follow people back and you have the ability to block followers (usually used only for spammers) from seeing your posts.
- **Following:** Electing to see someone's tweets in your own timeline. Follow people and companies that you're interested in hearing from.
- **Handle:** Your Twitter username is referred to as your handle, and is identified with the @ symbol. For example, Constant Contact's handle is @constantcontact. The @ is used to refer to a specific person or company and link to that account on Twitter within a tweet.
- **Hashtag:** Words preceded by a # sign (i.e., #ctctsocial) can be used to tie various tweets together and relate them to a topic, be it a conference, TV show, sporting event, or any happening or trend

of your choosing. Twitter automatically links all hashtags so users can search for other tweets using the same tag.

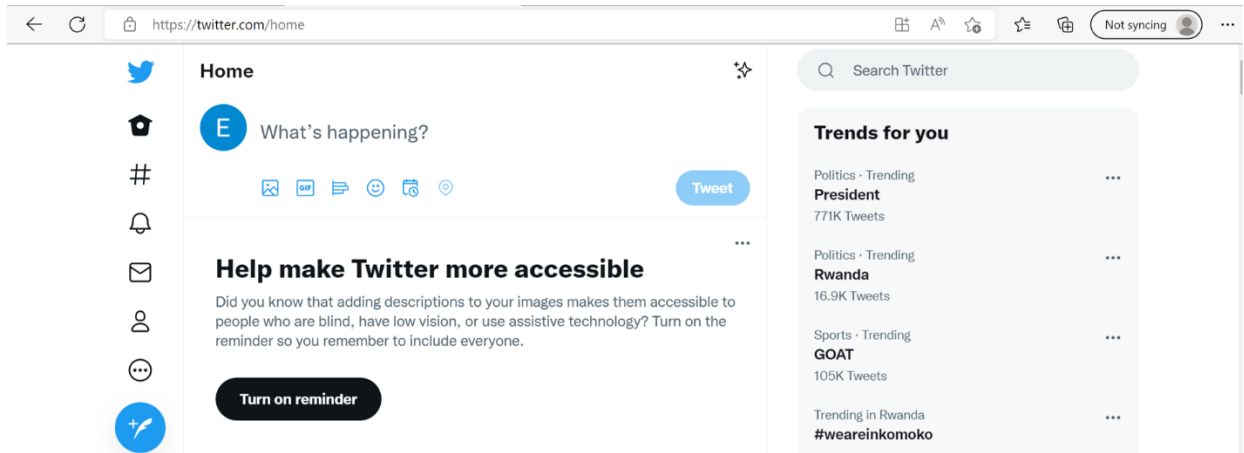
- **Lists:** A way to combine select people you follow on Twitter into a smaller feed. A list can be made up of friends, competitors, people in the same state: anything you want. Lists let you view a slice of your followers at a time and are a great way to focus on specific folks when you're following a large number of people. They can also be marked as public or private.

The first step in getting started on Twitter is creating your account. When creating your account, it's important to remember that your username—or as it's called on Twitter: your “handle,” is outward facing and will be what the public uses to identify your business. Hopefully, your business name will be available (Constant Contact's handle for example is @ConstantContact,) but if not, you'll want to come up with something that will still make sense to your followers (for example: “In a Pickle Restaurant” in Waltham had to use @InAPickleRest).



Choose the right Twitter handle

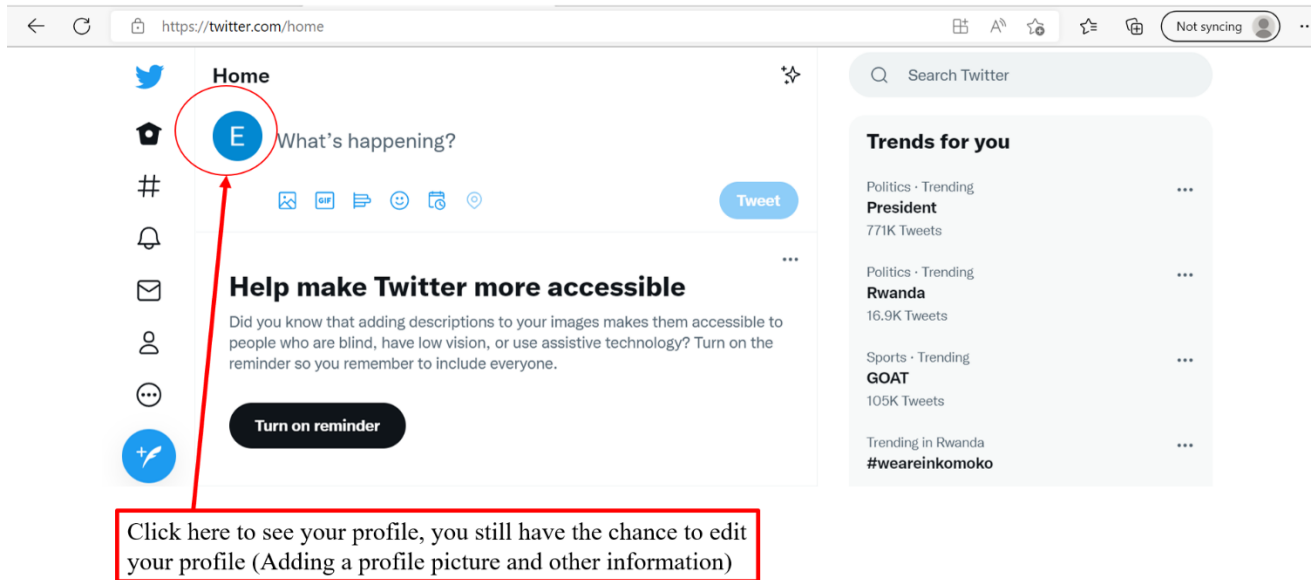
Click next to reach in your twitter account



You get this interface after completing all 5 steps, you can now start exploring twitter.

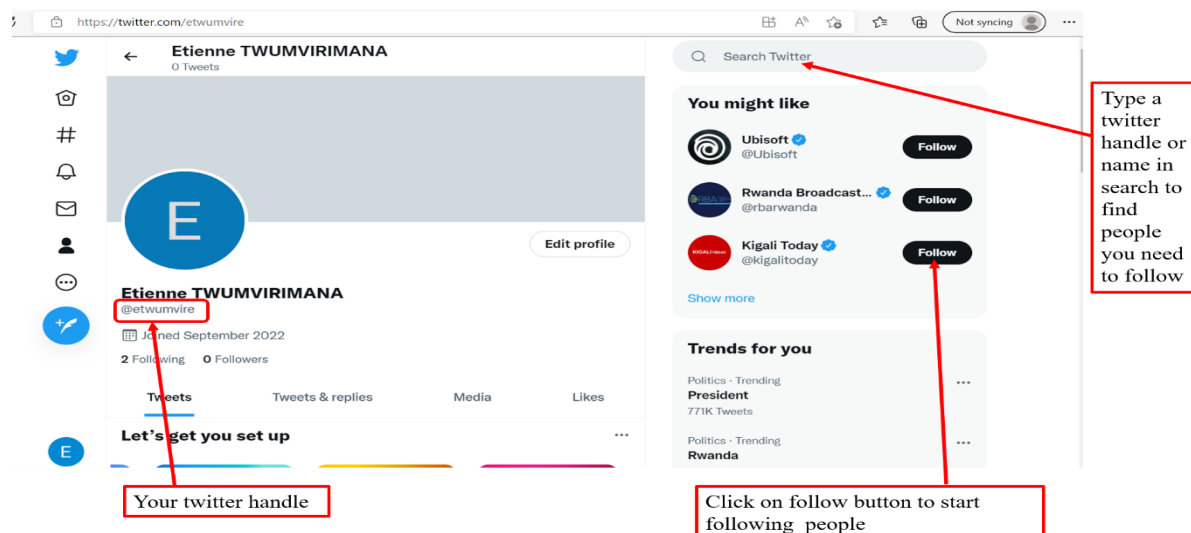
Profile and adjusting your privacy settings

By default, everything you share on Twitter is public. This means anyone can see the things you tweet, even if they don't follow you on Twitter. However, if you want to control who can see your tweets, there's an easy option. Navigate to your profile page. If you're using the mobile app, locate and select the Gear icon. If you're using a desktop web browser, select the Profile icon near the upper-right corner, then choose Settings.

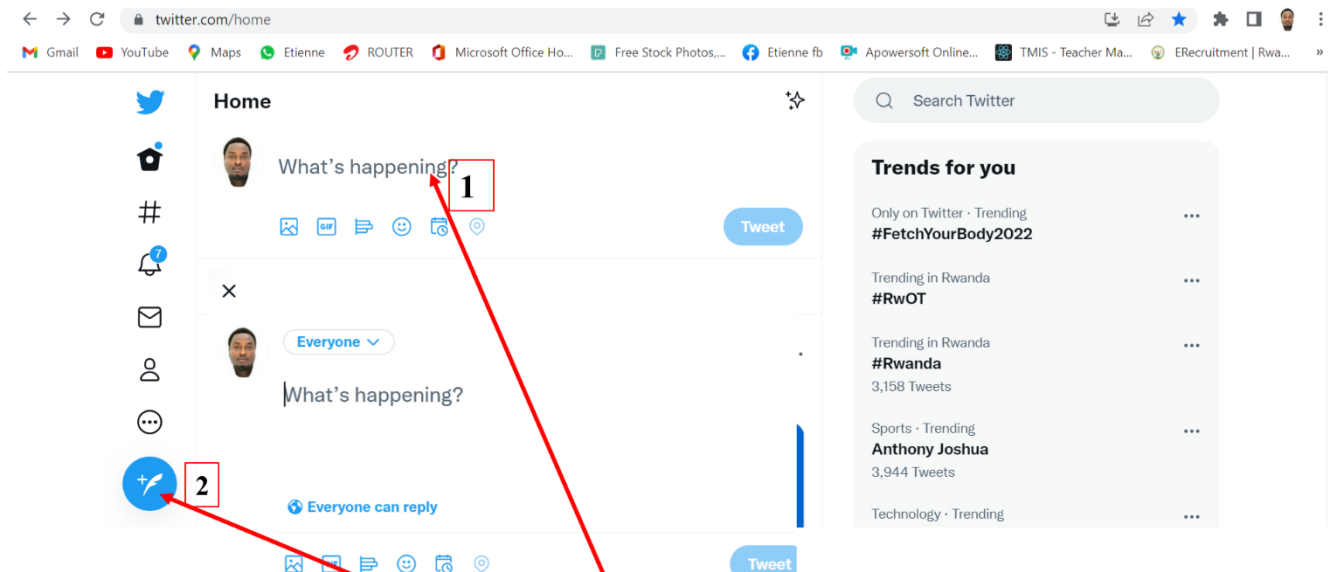


You get this interface after completing all 5 steps, you can now start exploring twitter.

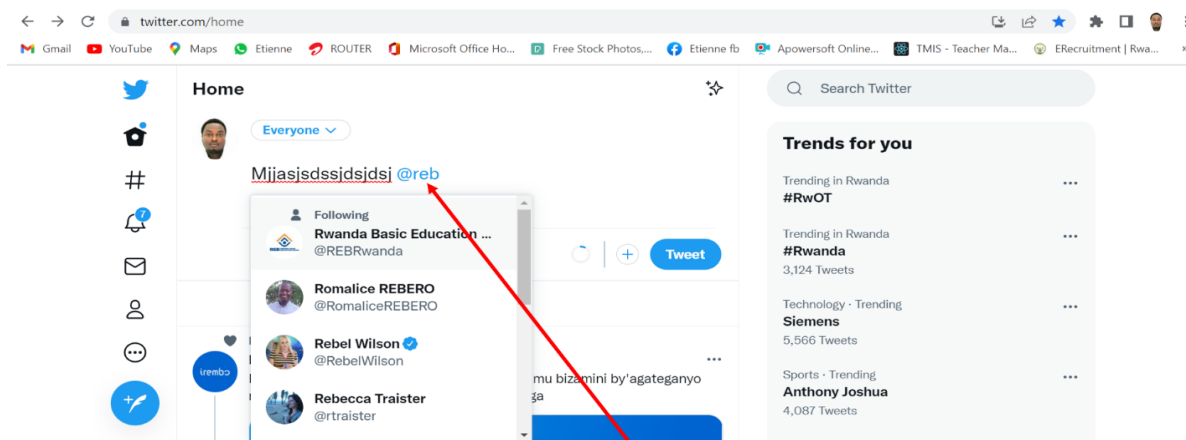
Who you follow on Twitter will dictate the type of content you have access to and the quality of the relationships you're able to establish. For this reason, you'll want to set up some criteria based on your experience, your industry, and what you're trying to accomplish. People you may want to follow could include: friends, professionals in your industry, other local businesses, colleagues, and even current or potential customers.



Creating and post a tweet

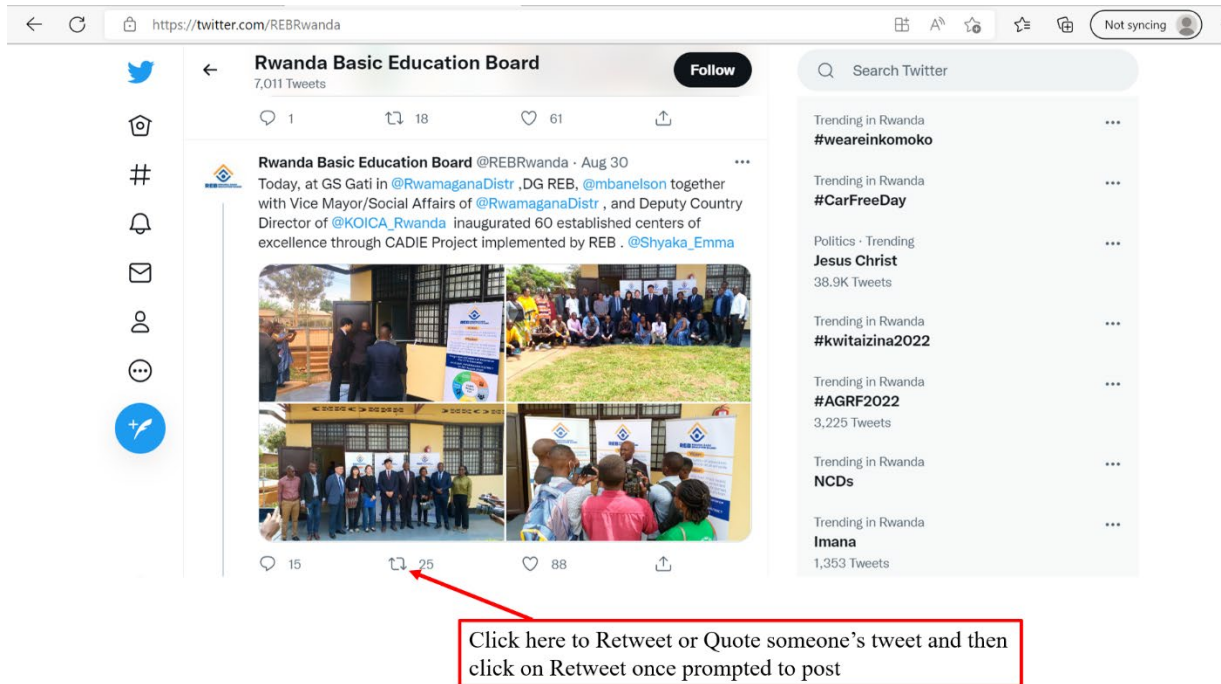


Click 1 or 2 to create a tweet. You can choose who can see and reply to the tweet



You can create a tweet and tag people by type their twitter handle or name (start with @ when typing a twitter handle). Click on Tweet button to post.

Retweet is when you share a tweet without adding any comment or words to the actual tweet. Hence, keeping the original tweet and concept tweeted by the user. On the other hand, the re-sharing of the tweet with an added comment is called a Quote Tweet.



5.3.2. Facebook

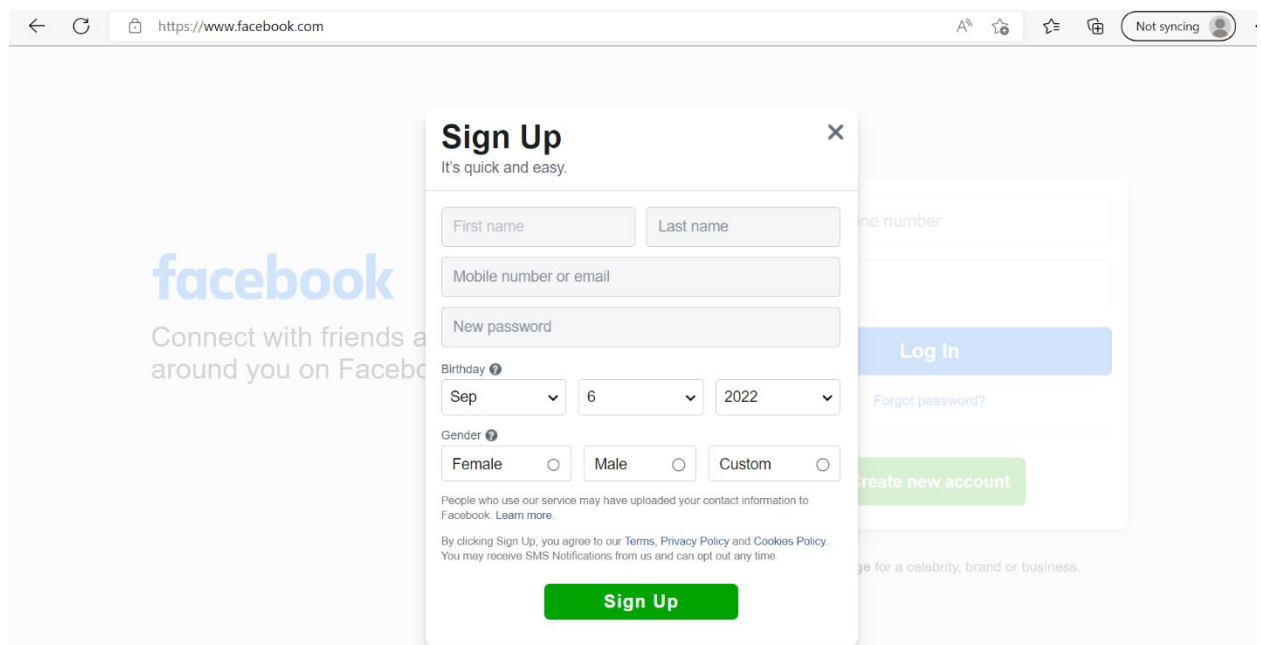
Facebook is a website where you can connect with friends and family and share with others. You can post a wide variety of content, including text, photos, links, events, interactive polls and more. Shared content can be made publicly accessible, or it can be shared only among a select group of friends or family, or with a single person.

To create a Facebook account

Go to www.facebook.com (the Facebook homepage).

- You will need to be at least 13 years old to create an account. Facebook accounts are free, and you should only create one.

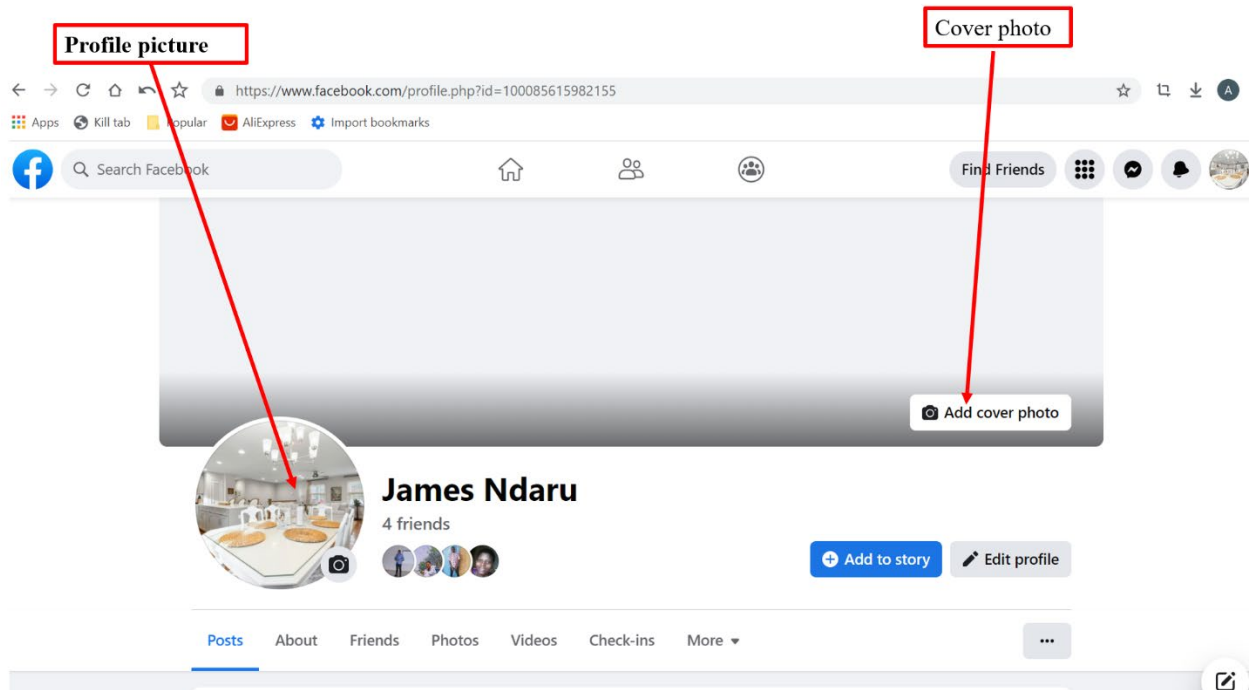
- Fill in the “sign up” form. Enter your name, email or mobile phone number, password, date of birth and gender. You must use your real name for your account. Nicknames are allowed as long as they are a variation on your real name.
- Click Sign Up.
- Click the link in the email to activate your account.



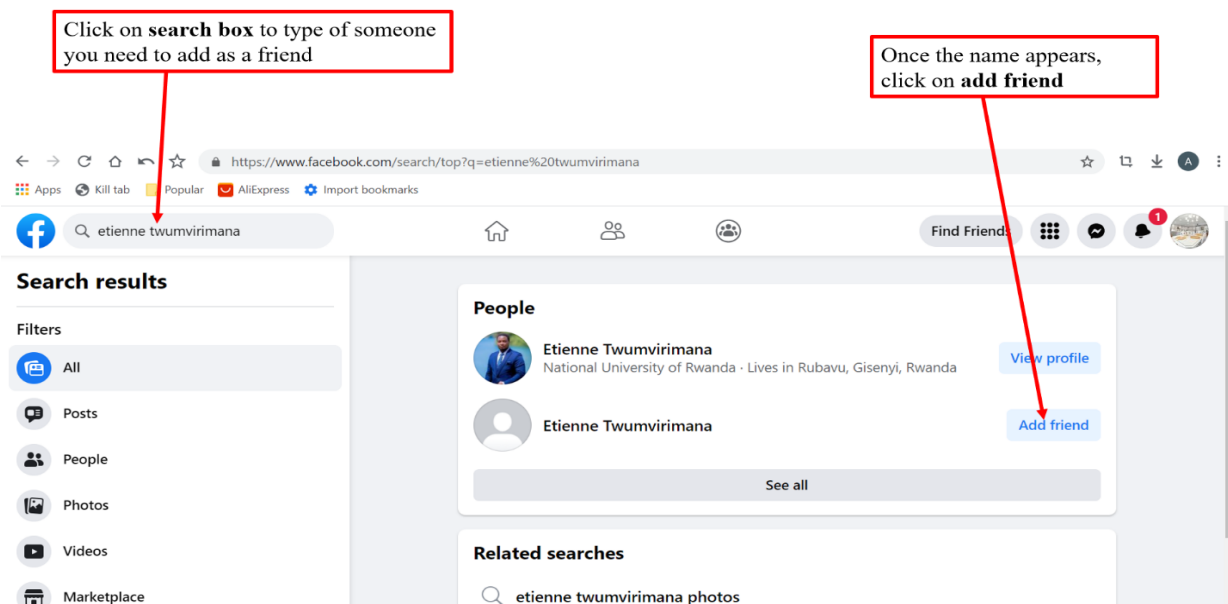
Setting up your profile

To add a profile picture over the silhouette placeholder and click ‘update’. You can add a picture of anything you like, although ideally you should add a photo of yourself.

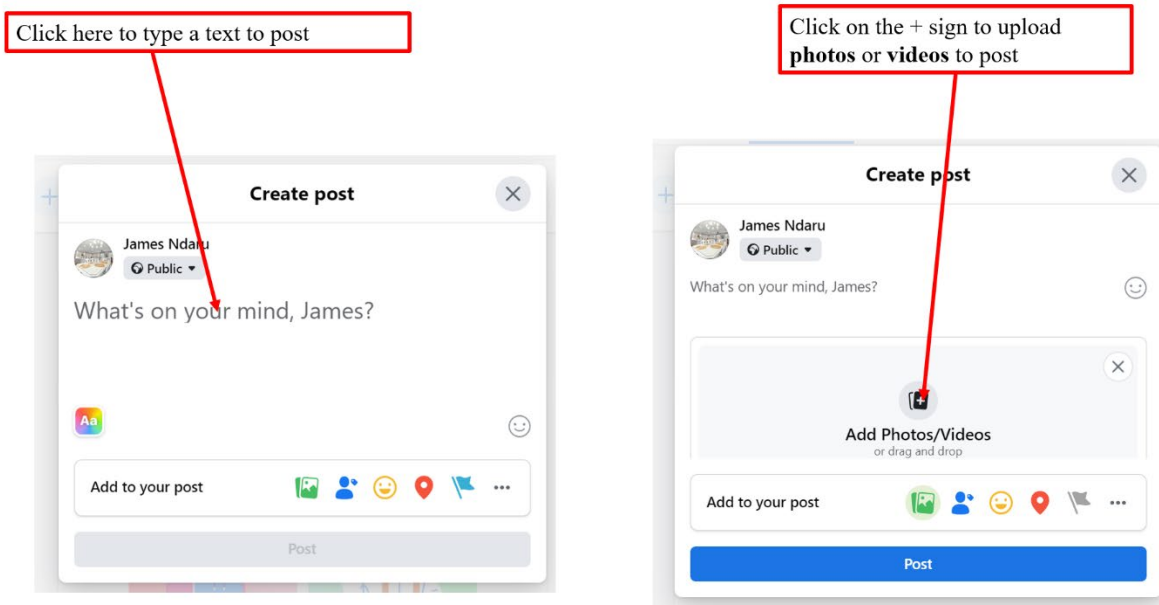
Similar to adding a profile picture, you can also add a photo that displays above your profile. Hover over the blank space and click “Add Cover Photo”.



The way you connect with others on Facebook is by adding ‘friends. You can search for people by their name or email, import your contact lists, and invite friends that aren't currently using Facebook. When you find someone that you want to add, you will need to send a friend request. Once they accept your invitation, that person will be added to your Friends list.



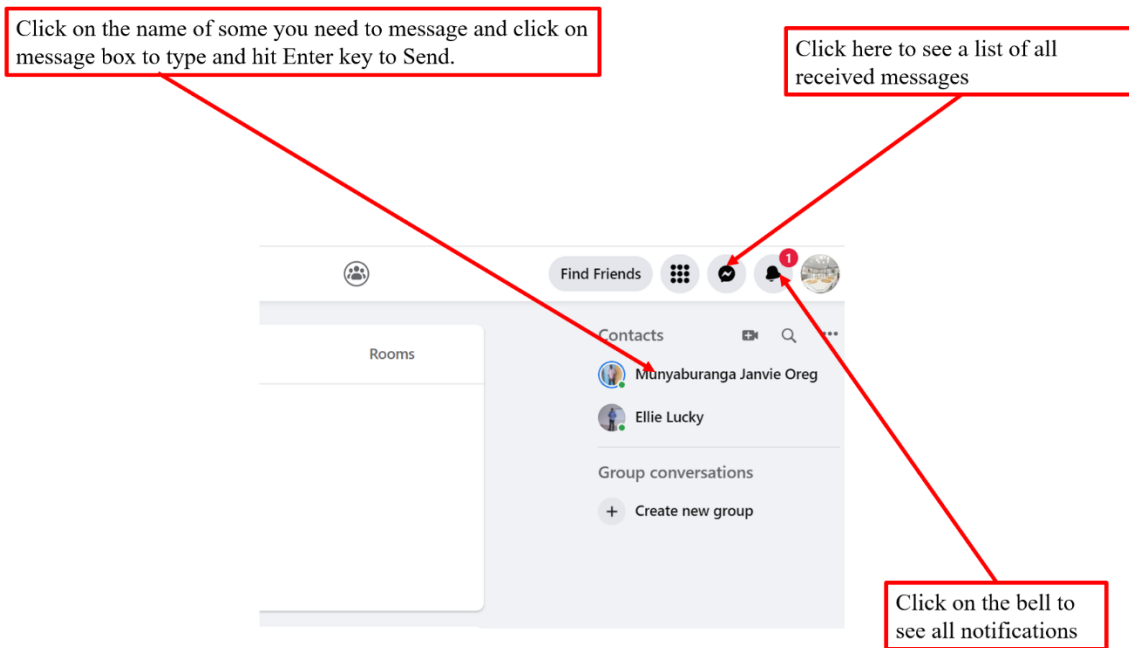
A Facebook post or "status update" is a message that you post (share) on your Facebook. It can take the form of a comment, link, picture, video or other media and is 'posted' to your Personal Profile (your "Wall" or "Timeline") and shows up in your Friends News Feed (depending on your privacy settings). It is one way of communicating with your friends and family on Facebook.



If you're friends with someone, their posts will appear in your News Feed (on the homepage) and you can interact and engage with them. You can click "Comment" below a post they make and then type a comment to add below their original post. Any friends who see your content will see this post in their News Feed pages as well.



As well as ‘posts’ which are a means to communicate with all your friends in one go (depending on your privacy settings), private messages are a way to communicate with certain friends (or a group of friends) privately on Facebook.



5.4. PRACTICE

Activity 5 : Do the following tasks to complete this activity

After connecting your computer to available network /Wi-Fi, make a research on any topic from your teaching subject using any search engine. Create your own Gmail account and send the results found in a) to trainerse@gmail.com as an attachment. Sign up for twitter and follow REB twitter account, make sure you have followers and also customized profile with your picture.

Create a Facebook account for yourself, find friends there after adding a cover and a profile picture.

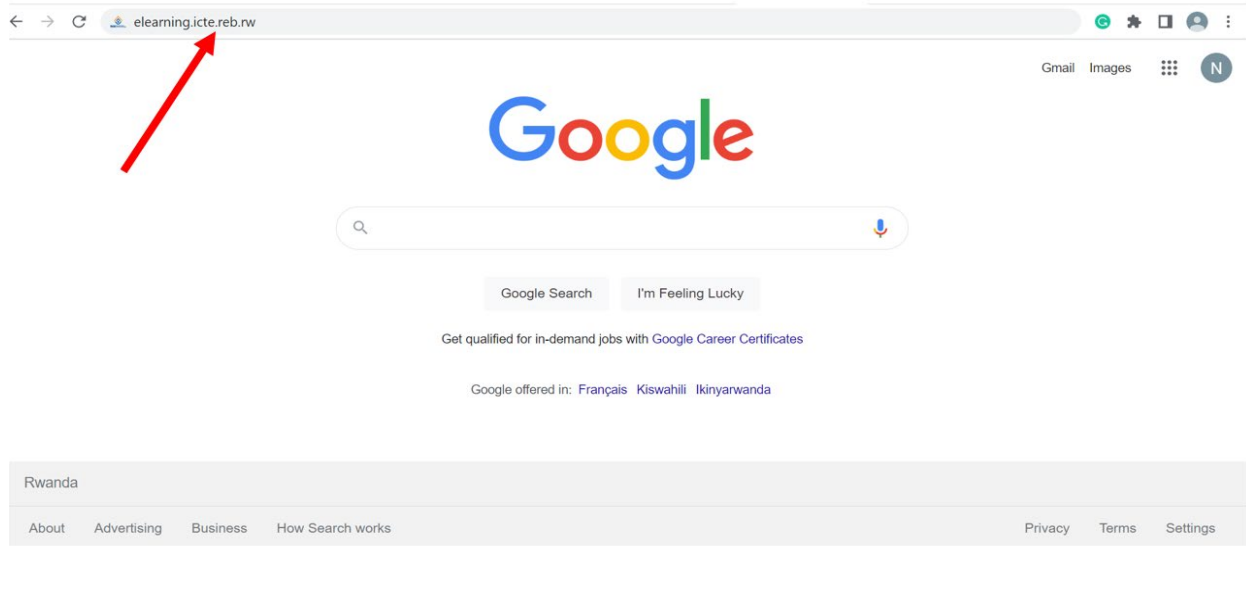
Visit REB YouTube channel and get at least two teaching /learning videos resources that can support/help you in your daily teaching activities offline.

MODULE 6: USE OF ONLINE LEARNING PLATFORMS

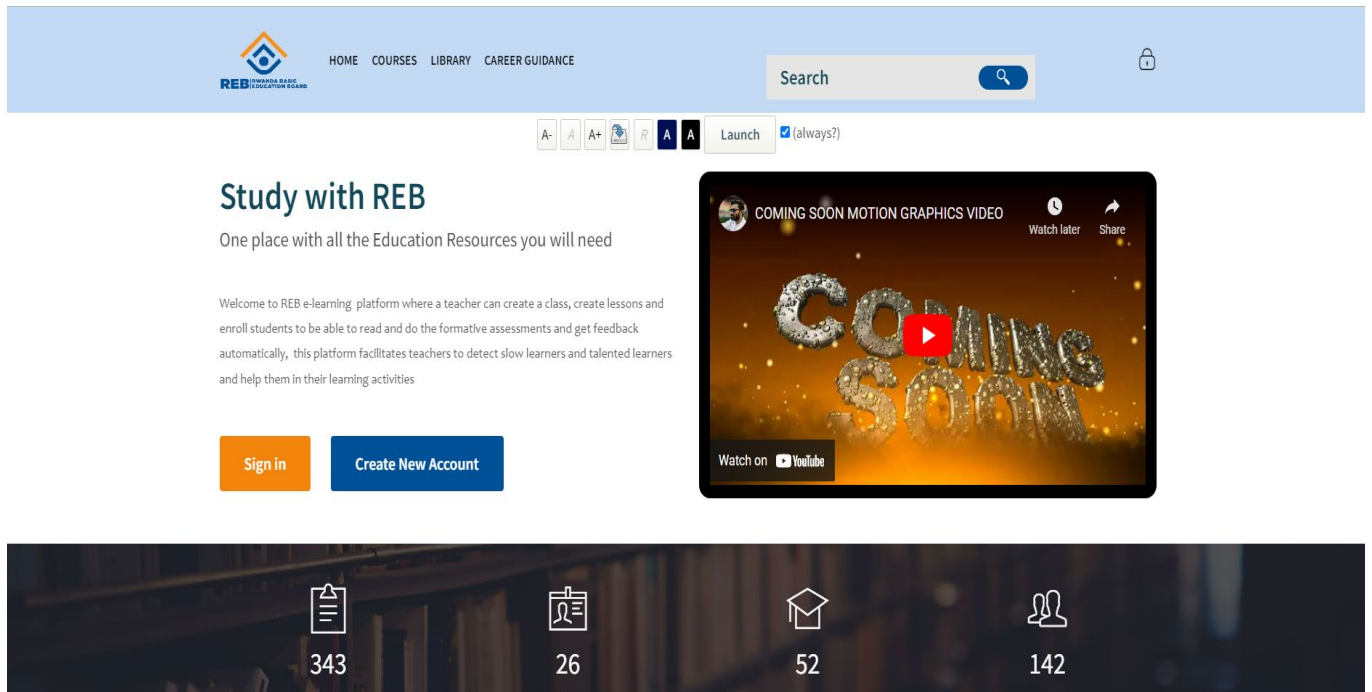
An online learning platform is a portal for educational content and resources that offers a student or a teacher everything they need in one place: lectures, resources, opportunities to meet and chat with other students, and more. It is also an excellent way for the student and the teacher to monitor student progress. In this Module we shall see how to use REB e-Learning platform or learning management system (LMS) and REB YouTube channel to access different educational resources.

6.1. Access REB learning management system through the web

- Enter the address “<https://elearning.reb.rw/>” on the web search bar of any browser (chrome, opera, etc.) and press Enter

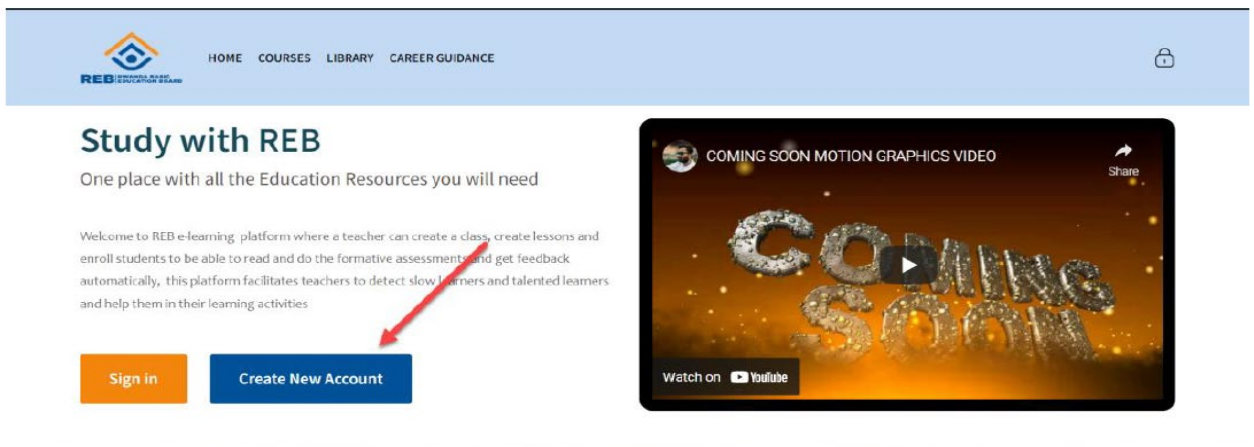


- The Home Page appears when you first access the system.



6.1.1. Create an account

- Click Create New Account Button



- Select the user type (Teacher or Student)

- Click on **Validate button** at the bottom

The screenshot shows a registration form titled "Provide Identification". It contains two input fields: "User Type" with a dropdown menu showing "--select--" and "Identification" with the value "110819161579". Both fields have a red error icon to their left. Below the fields are two buttons: "Validate" and "Cancel". A red arrow points from the bottom left towards the "Validate" button. At the bottom of the form, there is a message: "There are required fields in this form, marked ". On the right side, there is an "Accessibility" panel with options for font size (A-, A, A+), contrast (R, A, A+), and a "Launch" button with a checked checkbox labeled "(always?)".

- Click the **Create my new account** button to finish the validation.

The screenshot shows the "New account" page for the Rwanda Basic Education Board (REB). The page features the REB logo at the top left. Below the logo, the text "New account" is displayed, followed by an "Expand all" link. A section titled "User Information" is expanded, showing the following details: "Identification:" (blurred), "User Type:" TEACHER, "First Name:" TWAHIRWA, "Middle Name:" (blank), and "Last Name:" EMMANUEL.


District: Karongi
School: TTC RUBENGERA
Position: Class Teacher
NOTE: Make sure details are yours before you create account


Teaching Subjects(0)


Create Password

Phone: +250782012305
Email address: temmanuel1010@gmail.com
Username:

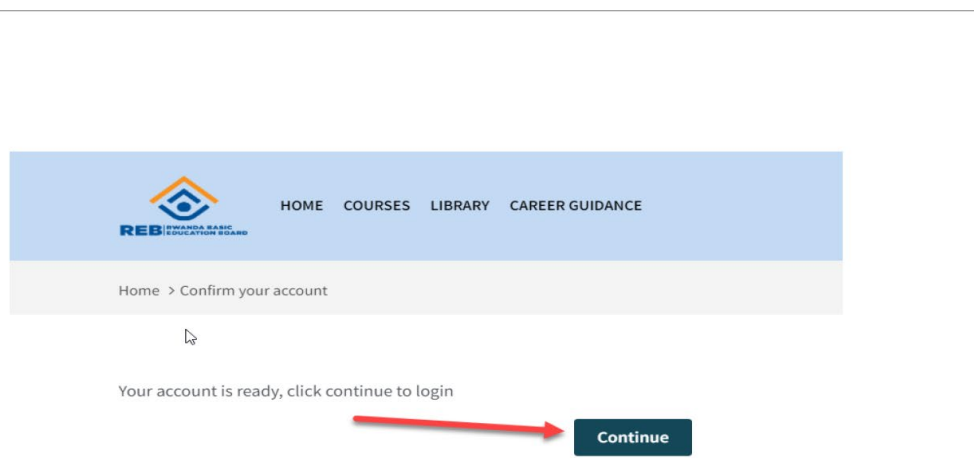
The password must have at least 8 characters, at least 1 digit(s), at least 1 lower case letter(s), at least 1 upper case letter(s), at least 1 non-alphanumeric character(s) such as *, -, , or #

New password  Password

Confirm Password  Type the same password

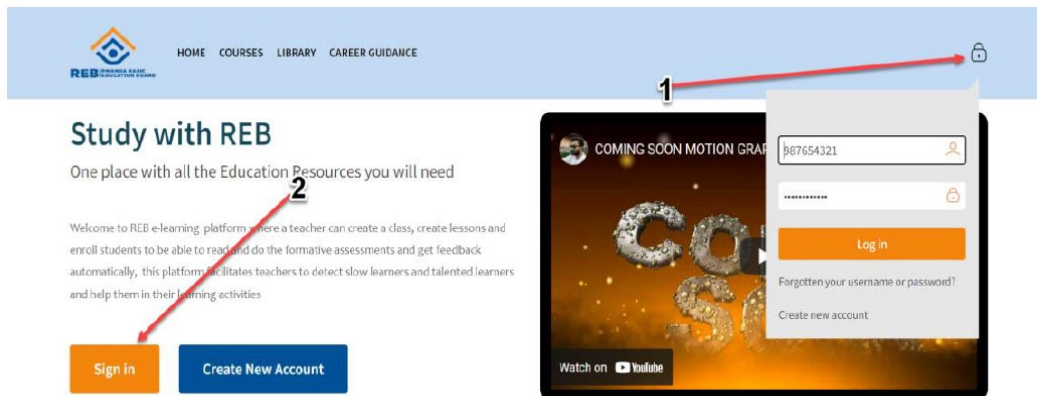
There are required fields in this form marked .

- Click continue



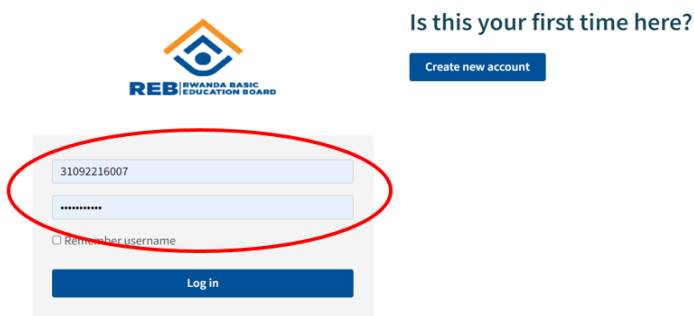
- To access into the system and use it, the teacher will be required to login by providing his/her **Identification number** and **Password**. There are two ways to do so.

- The teacher will click the lock icon on the upper right and fill the fields then click **login button**



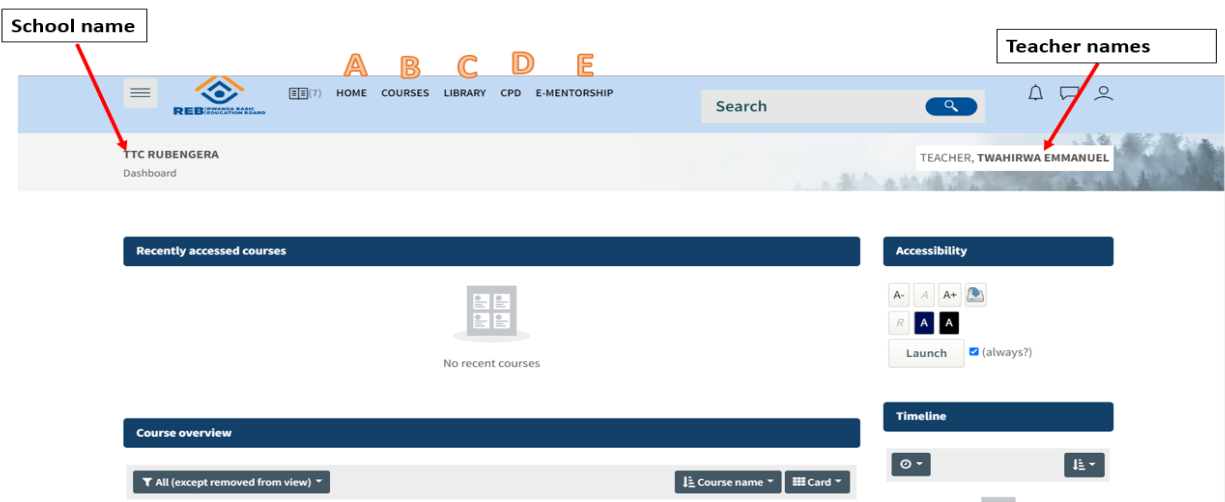
1. Lock icon
2. Sign in button

- Click the sign in button
- Click the Login button to use the system

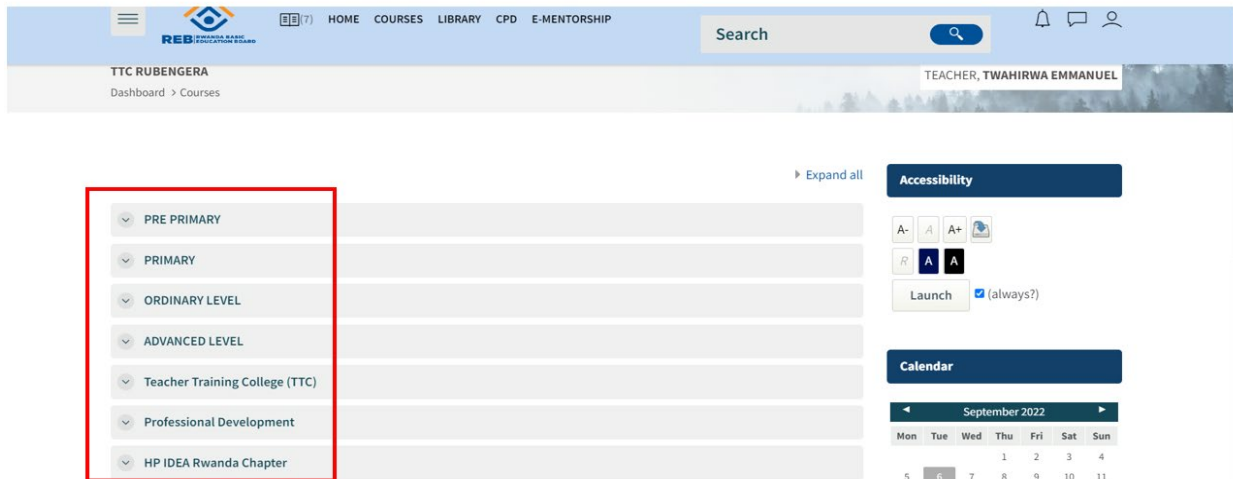


After Login into the portal, the Teacher Dashboard page will appear. The teachers Dashboard Contains various setting and contents.

6.1.2. Teacher Dashboard navigation



B. When you click on Courses it will take you to a page that display all Courses Categories



C. When you click on Library it will take you to resources from e-Library

The screenshot shows a digital library interface with a search bar and navigation tabs. On the left, there is a sidebar for 'All Subjects' including Biology (2), Creative Arts: Music (1), English (2), Kinyarwanda (2), Mathematics (1), Other Resources (2), and Physics (1). The main content area displays search results for CPD resources, with a red box highlighting three items:

- English Senior 2**: Authors: REB, Subject: English Senior 2, Video file (MP4)
- Kinyarwanda primary 1**: Authors: REB, Subject: Kinyarwanda Primary One, PDF document
- pPhysics 101**: Authors: 1212, Subject: Physics Senior 4, PDF document

On the right, there is an 'Accessibility' panel with options for font size (A-, A, A+), a refresh icon, and a 'Launch' button with a checked '(always?)' option.

D. When you click on CPD it will take you to different professional development courses

The screenshot shows a professional development course selection page for TTC RUBENGERA. The page header includes the user's name 'TEACHER, TWAHIRWA EMMANUEL' and a breadcrumb trail: 'Dashboard > Courses > Professional Development > Continuous Profession development'. Below the header, there is a search bar and an 'Accessibility' panel. The main content area displays a list of course categories, with a red box highlighting the following items:

- ▼ Certificate
- ▼ Diploma
- ▼ Advanced certificates
- ▼ Advanced diploma
- ▼ Other programmes

On the right, there is a 'Calendar' section showing a calendar for September 2022.

E. When you click on E-mentorship it will take you to a forum to share and exchange knowledge and ideas

The screenshot shows an E-Mentorship forum page. The page title is 'E-Mentorship' and the description states: 'Teachers will use this forum to share and exchange knowledge and ideas which will help in the development of their career.' Below the description, there is a 'Forums' section and an 'Accessibility' panel. The main content area displays a list of forum posts, with a red box highlighting the following post:

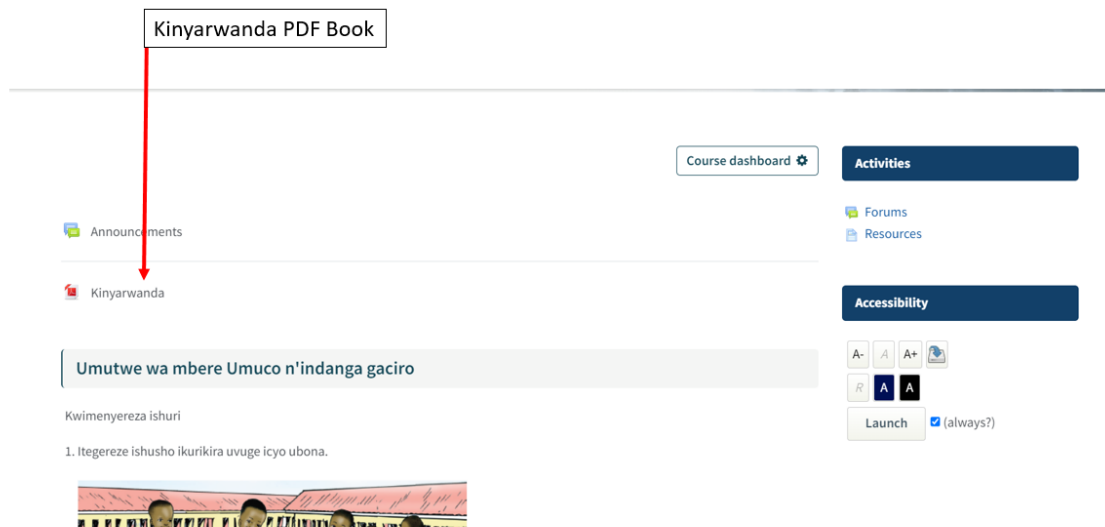
- DL** by MUSHIMIYIMANA Valerie - Tuesday, 15 February 2022, 3:24 PM
What id DL in full

Below the highlighted post, there is another post by ICT (REBERO REBBECA Claudine) dated Saturday, 22 January 2022, 10:07 AM.

6.1.3. Accessing learning resources

Courses

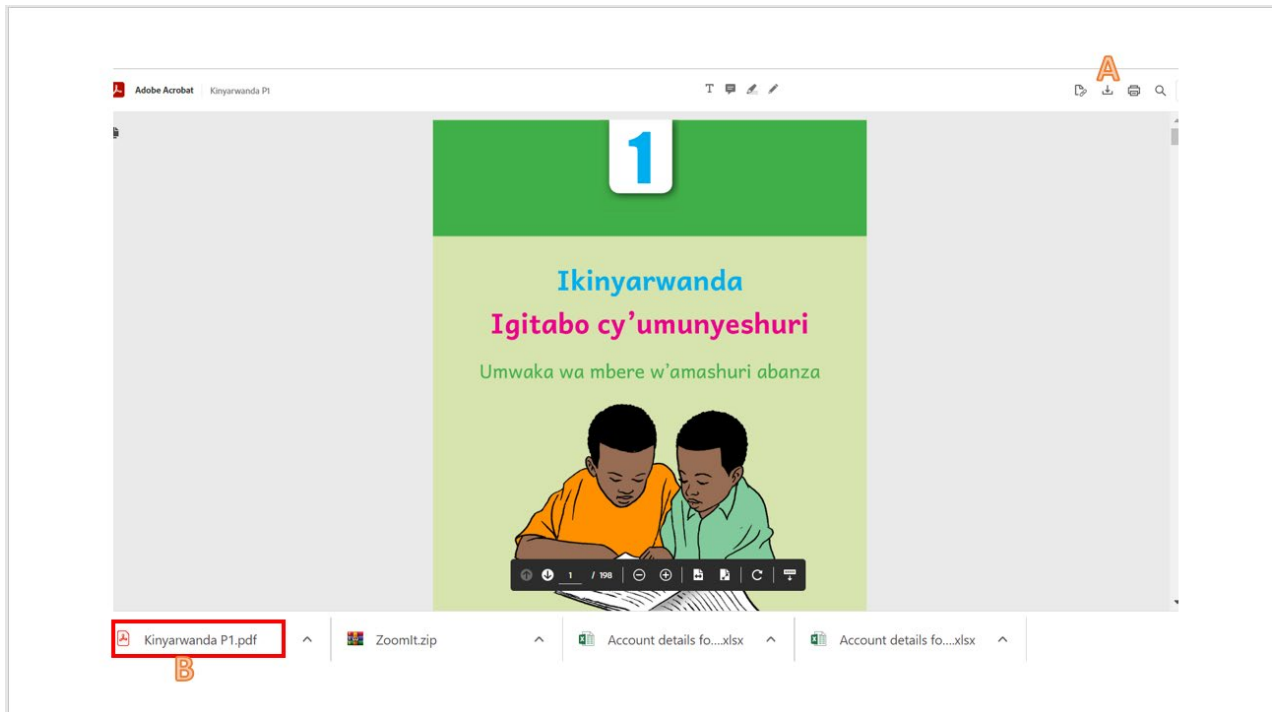
- Click on courses



- Click on the Book to Download and read it



- Click on the download button to save the book on your device

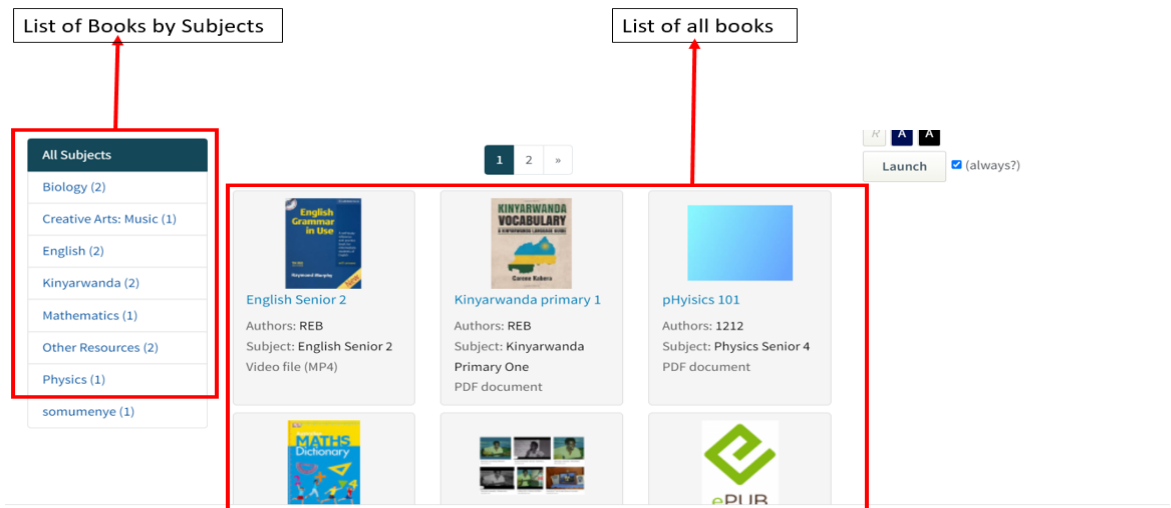


A. Download button

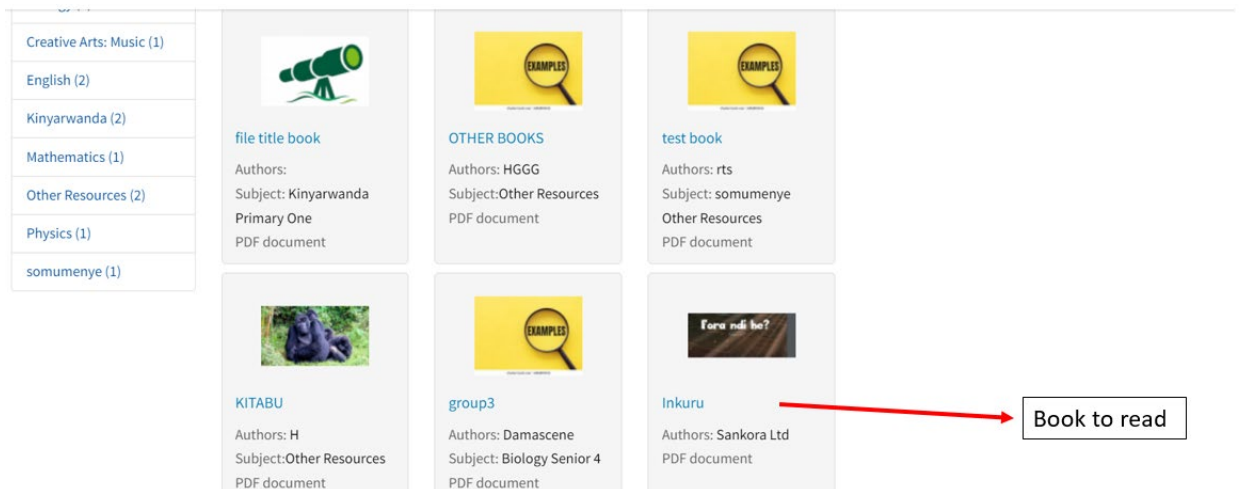
B. Downloaded Kinyarwanda Book

6.1.4. Library

- Click on Library

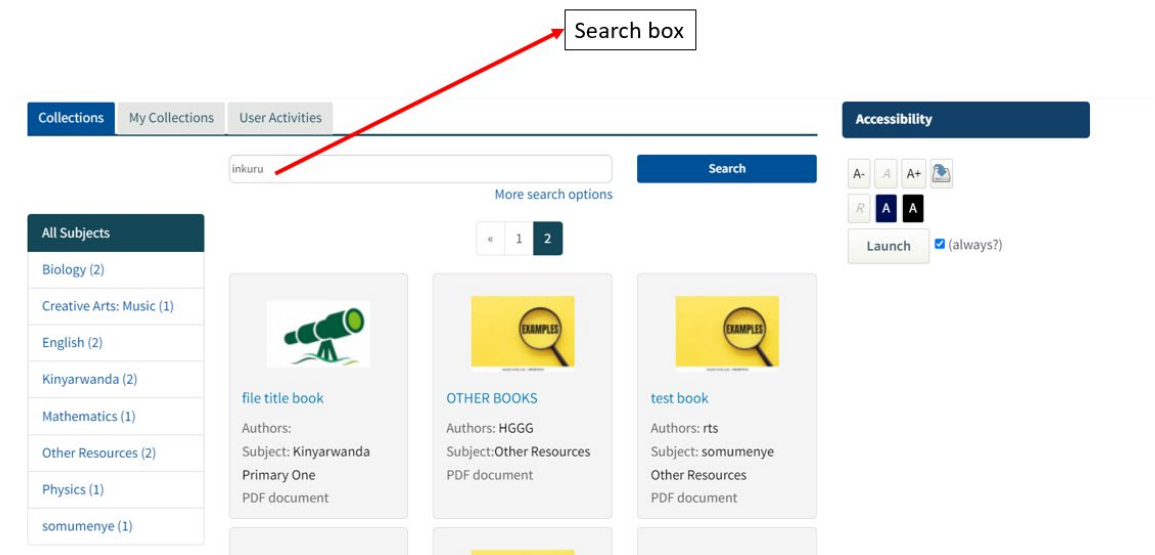


- Click on the Subject

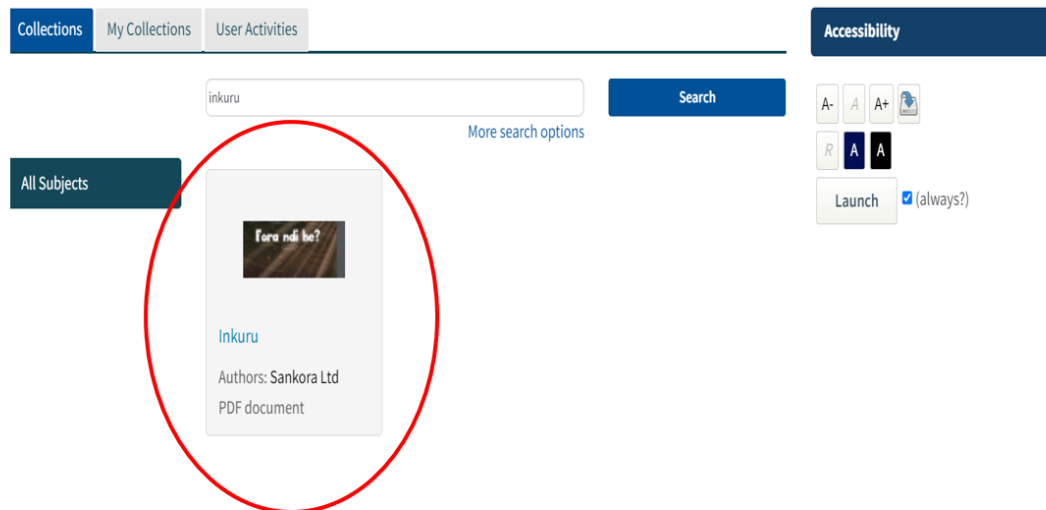


b) Searching a book from search box

- Click on library



- The book will be displayed



c) Reading a Book from the e-Library

- Click library
- Search the book
- Click Read

The image displays three sequential screenshots of a digital library interface for the book 'Inkuru'.

Top Screenshot: Shows the book details for 'Inkuru'. The title is 'Inkuru'. Metadata includes: Publication Year: 2019, language: Kinyarwanda(Kn), Author: Sankora Ltd, Created: Tuesday, 6 September 2022, 3:55 PM, File Type: PDF document. A blue 'READ' button is visible. On the right, an 'Accessibility' panel contains icons for font size (A-, A, A+), text-to-speech (R, A, A+), and a 'Launch' button with a checked '(always?)' option.

Middle Screenshot: Shows the same book details, but the 'READ' button has been replaced by a grey 'Open file' button. The 'Accessibility' panel remains on the right.

Bottom Screenshot: Shows a light blue banner at the top with the text 'You are READING this content' and a blue 'FINISH READING' button. To the right is a 'Launch' button with a checked '(always?)' option. Below the banner is a 'Download' button with a blue 'B' icon. The bottom part of the image shows a PDF viewer window titled 'Inkuru.pdf' at page 5 of 24, zoomed to 68%. The page content includes illustrations of a bird (labeled 'Ifi'), a butterfly (labeled 'Ikinyugunyugu'), a frog (labeled 'Umutubu'), and a chick (labeled 'Umushwi').

A. Click on finish reading to finish reading the book

B. Click on Download to download the book

6.1.5. Sharing Ideas through E-mentorship

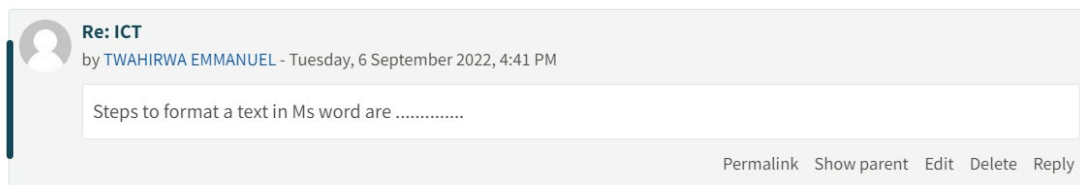
a) Replying to a posted topic

- Click e-mentorship
- Click discuss to this topic

- Type in the text box

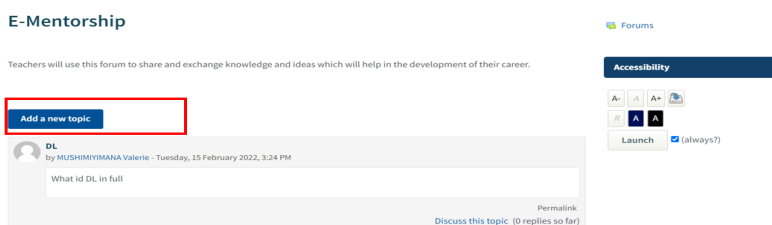


- Your post is seen by other teachers



b) Posting a Topic

- Click Add topic



- Type the message

The screenshot shows a forum post creation form. At the top left is a blue button labeled 'Add a new topic'. Below it, the 'Subject' field contains the text 'SET'. The 'Message' field contains the text 'What are the technics for wastes management'. A rich text editor toolbar is positioned above the message field, featuring icons for undo, redo, bold (B), italic (I), bulleted list, numbered list, link, unlink, text color, background color, image, video, and audio. To the right of the form, there are accessibility controls: 'A-', 'A', 'A+' for font size, 'A' and 'A' for font color, and a 'Launch' button with a checked checkbox labeled '(always?)'. At the bottom of the form, there are two buttons: 'Post to forum' (blue) and 'Cancel' (orange), followed by the text 'Advanced'.

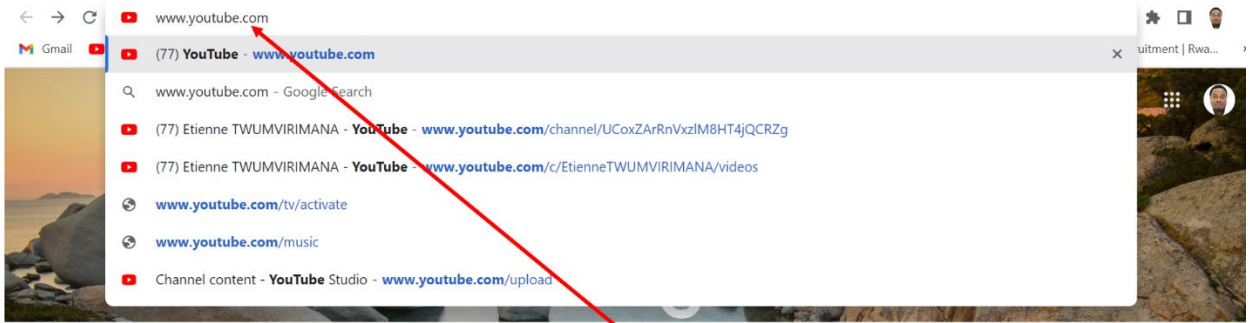
- Click post to forum

The screenshot displays a forum post confirmation and the resulting post. A green notification box at the top contains the text: 'Your post was successfully added. You have 30 mins to edit it if you want to make any changes. TWAHIRWA EMMANUEL will be notified of new posts in 'SET' of 'E-Mentorship''. Below the notification is the forum header 'E-Mentorship' with a sub-header 'Teachers will use this forum to share and exchange knowledge and ideas which will help in the development of their career.' At the bottom, there is a button 'Add a new topic' and a post card for 'SET' by 'TWAHIRWA EMMANUEL' dated 'Tuesday, 6 September 2022, 4:58 PM' with the message 'What are the technics for wastes management'. To the right, there are accessibility controls: 'A-', 'A', 'A+' for font size, 'A' and 'A' for font color, and a 'Launch' button with a checked checkbox labeled '(always?)'.

6.2. REB YouTube channel

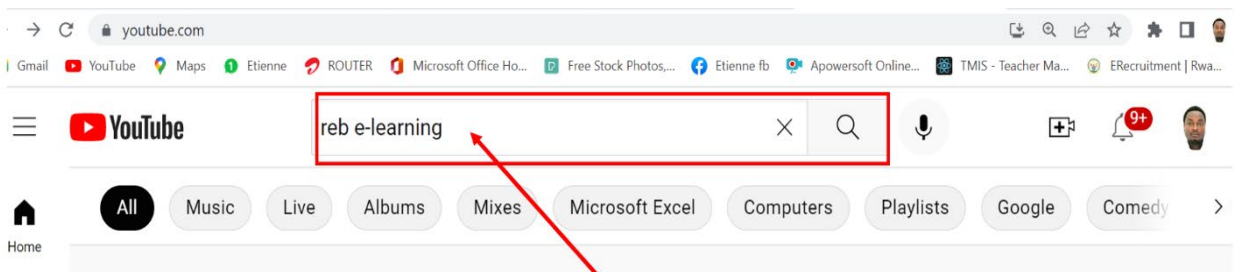
YouTube is a popular video sharing website where registered users can upload and share videos with anyone able to access the site. These videos can also be embedded and shared on other sites. Rwanda Basic Education Board has chosen to create a YouTube channel in order to help teachers and student to access video lessons. Here below are some guiding steps to the REB e-learning channel.

- Step 1



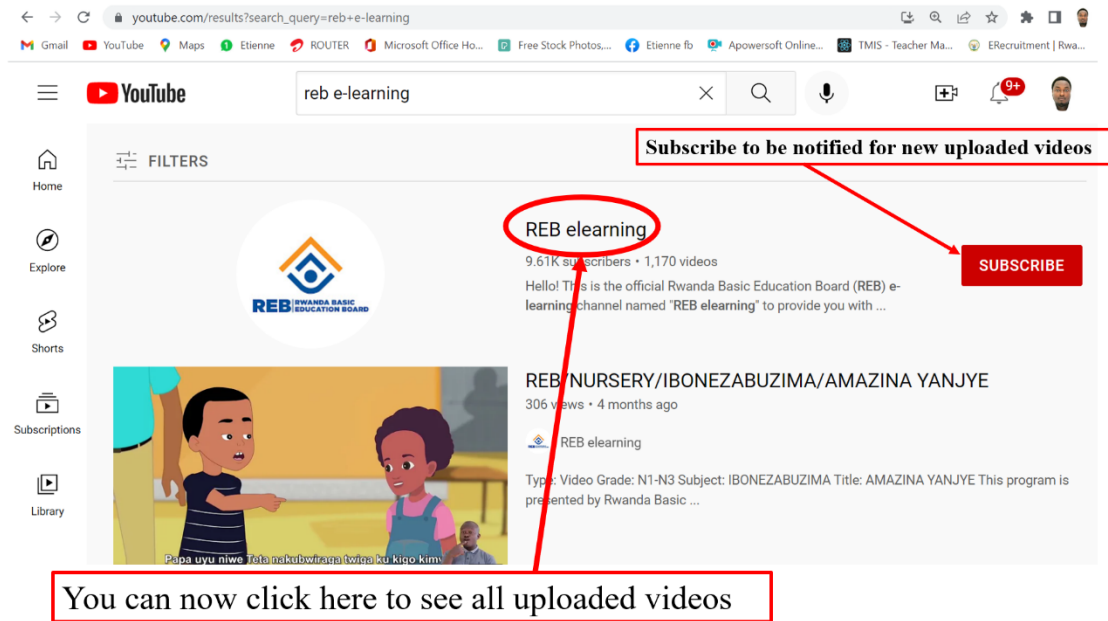
Go to any browser and type www.youtube.com in the address bar and hit ENTER key

▪ Step 2

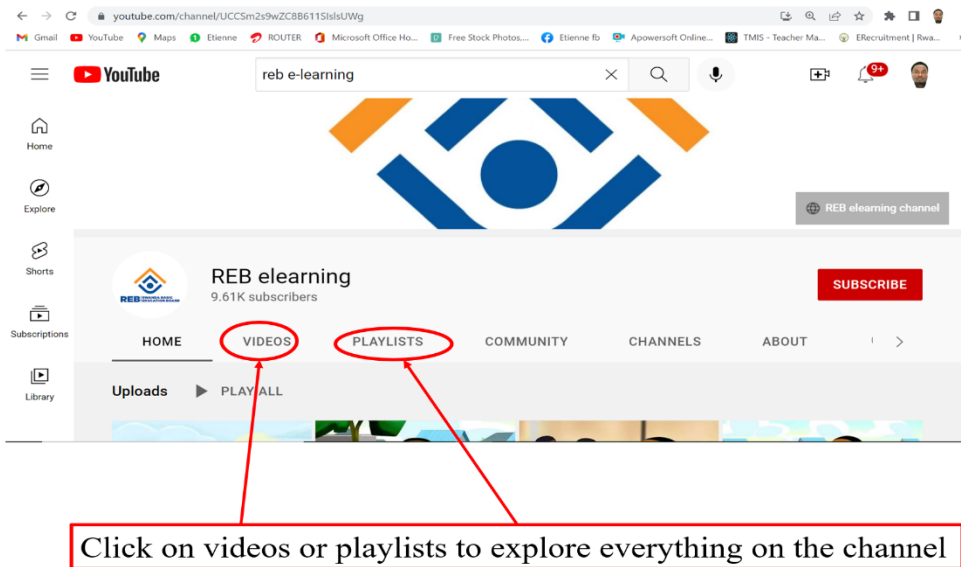


Go to YouTube search box and type **reb elearning**

▪ **Step 3**



▪ **Step 4**

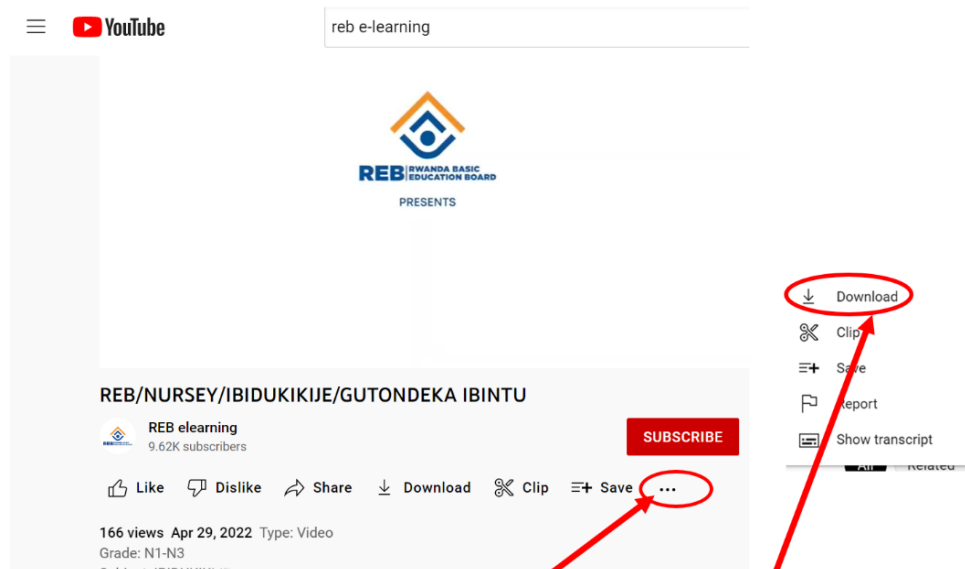


How to download YouTube videos on desktop

Very recently, YouTube introduced the ability to let desktop browser users download videos for offline viewing. The Google-owned platform says the feature will only be supported in computers with the latest versions of Chrome, Edge, or Opera browsers. Unlike mobile, this feature is only

available to Premium users on desktop. To download a video on desktop, follow the simple steps below:

1. Open YouTube on your browser. Ensure that your browser is updated to the latest version.
2. Search for the video you want to download.
3. Once the video is downloaded, you can find it in the hamburger menu in the left, in the Downloads section.
4. To choose download quality, head to **Settings > Downloads**. YouTube Premium users can download up to full-HD (1080p) quality.



Click on the three dots then download to watch the videos offline

6.3. PRACTICE

Activity 6: Do the following tasks to complete this activity :

Activate your account on e-learning.ict.e.reb.rw as a teacher then navigate through until you have a teaching and learning resource that can be used once you are offline.

MODULE 7. CONTENT ACCESS POINT



7.1. Introduction on CAP features

A Content Access Point is a wireless access point with an integrated digital content e-learning platform, which provides an easy-to-use interface and storage unit that can be loaded with educational materials that students can access without requiring access to the Internet.

7.1.1 CAP features

Pre-loaded Content

Content is pre-loaded allowing students and teacher access to connect quickly and easily. Teachers can also create and upload their own lesson plans. It is lightweight, portable and can easily be mounted to the wall with included hardware. The current preloaded content is based on the current textbooks used in primary schools.

Flexible Connectivity

The device offers multiple connection options and includes a battery providing up to 5 hours of continuous.

Content Access Point - Top View



Content Access Point - Bottom View



1	System LED status	7	Micro SD slot
2	3G/4G LTE LED status	8	Power plug
3	Power button	9	WAN Ethernet Port

4	Factory reset button	10	WAN Ethernet LED status
5	Wall – mount holes	11	WAN Ethernet activity status
6	WI-FI MAC Address label		

Main CAP Ports

The device has four ports

WAN Gigabit Ethernet

USB 3.0 (USB 2.0 Compatible)



Micro-SIM (Accessible by removing bottom cover)

Micro CD

Device placement location

- ✓ For the best signal put the Content Access Point:
- ✓ In an open area
- ✓ High off the floor
- ✓ Away from the wall
- ✓ Away from the magnetic and large metal object
- ✓ At least one (1) meter from the client device

7.1.2 CAP Setup

1. Connect the power supply	2. Power up the device by pressing and holding the power button
	

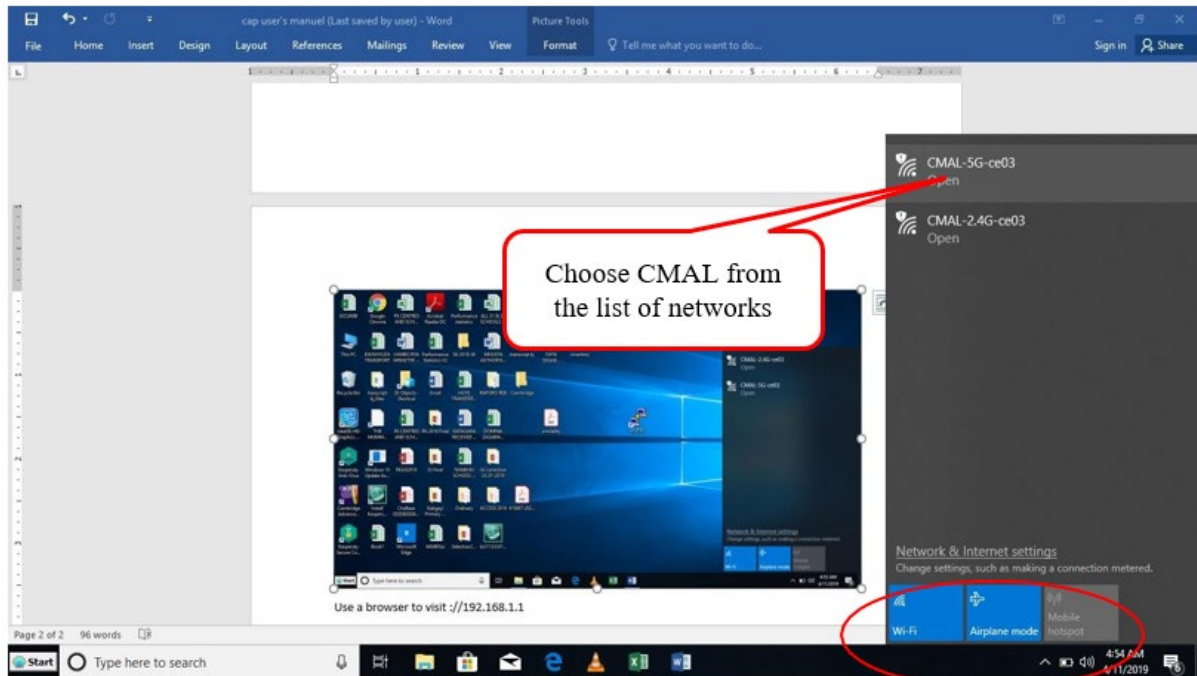
7. 2 How to access the system (content access point)

7. 2. 1 Connect different devices to CAP

1. Open your computer
2. Go to network and sharing center
3. Find WI-FI



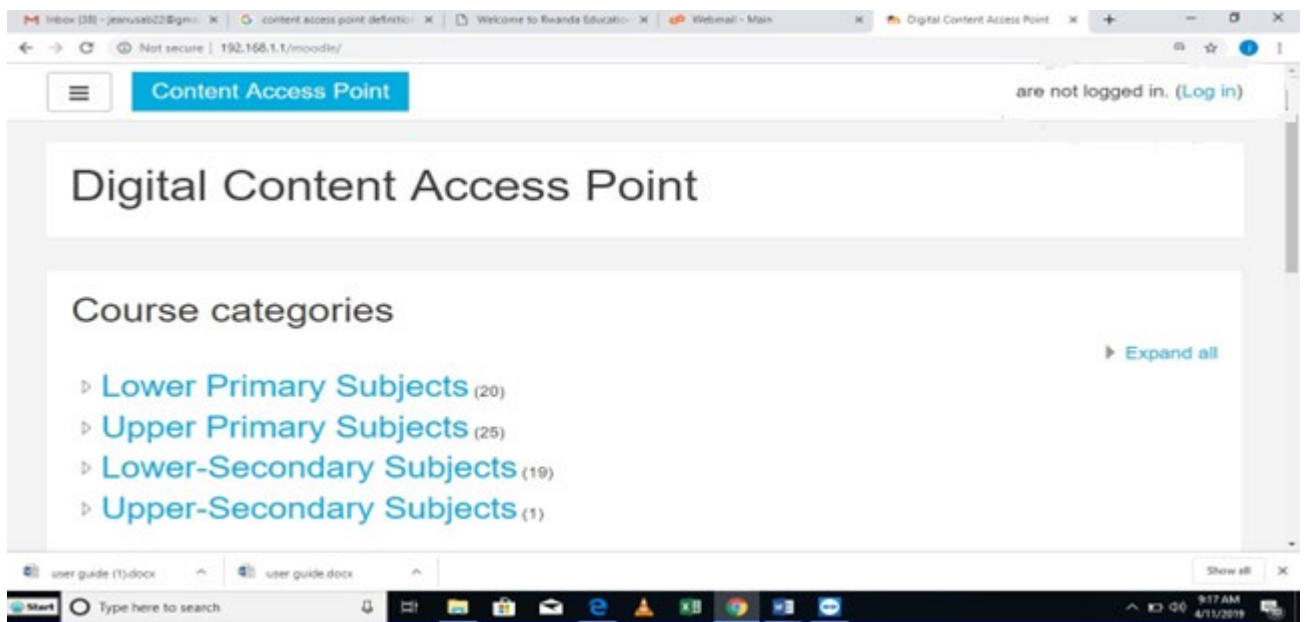
4. Among the displayed list of networks, choose “CMAL-5G”



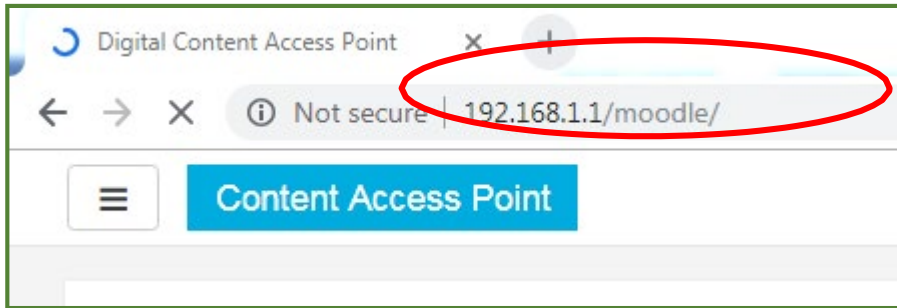
5. Connect to 5G and wait for the browser to open.

NB: The above indicated last four characters are not fixed; it will depend on mac address of the device (CAP).

Redirect to browser: my Content (make sure in the address box of your favorite it is written my. Content /Moodle

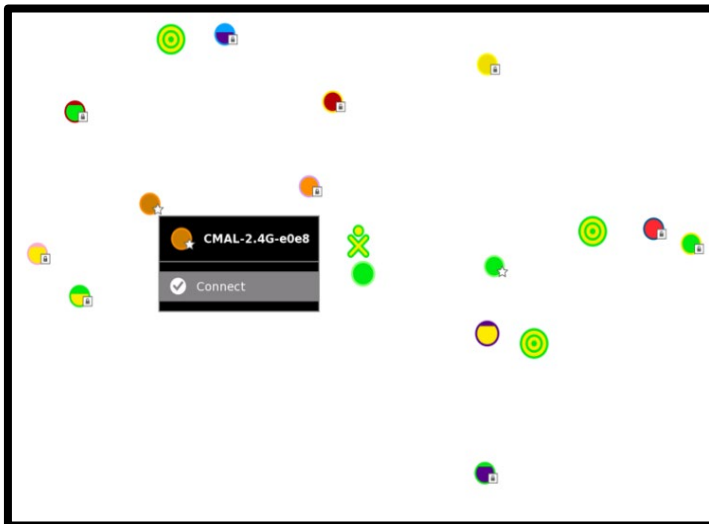


After being connected on CMAL-5G-db9d the browser (Mozilla Firefox, google chrome, internet explorer...) will be opened automatically depending on what is default on your computer. When it is not opened automatically you can write in the address box **my. Content** or **192.168.1.1/Moodle**.

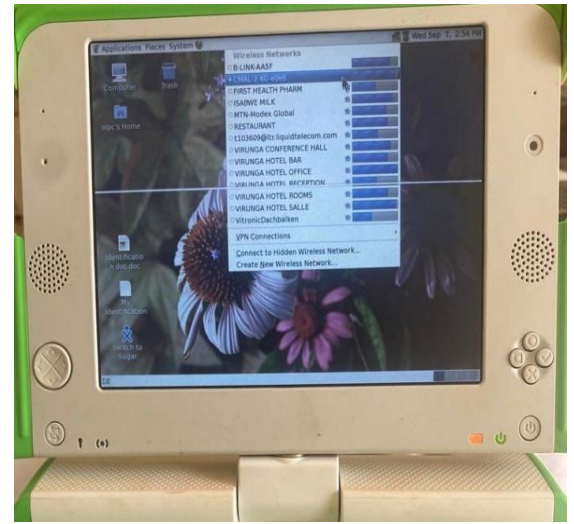


To connect to CAP using XO-Laptop

i. Using Sugar Interface

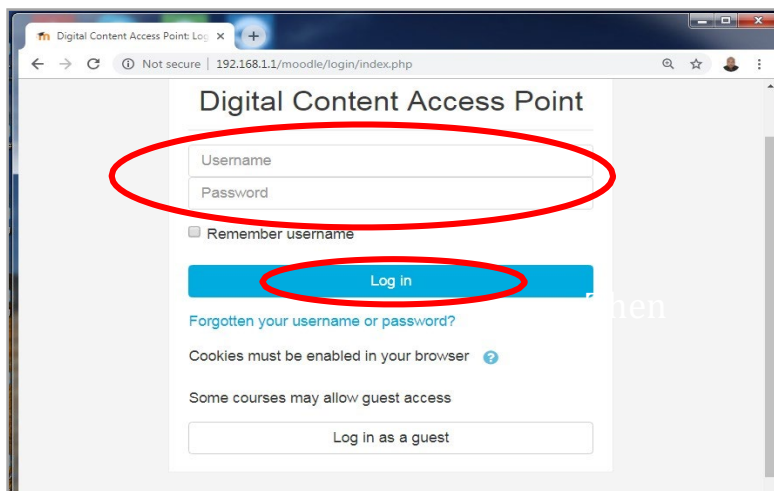
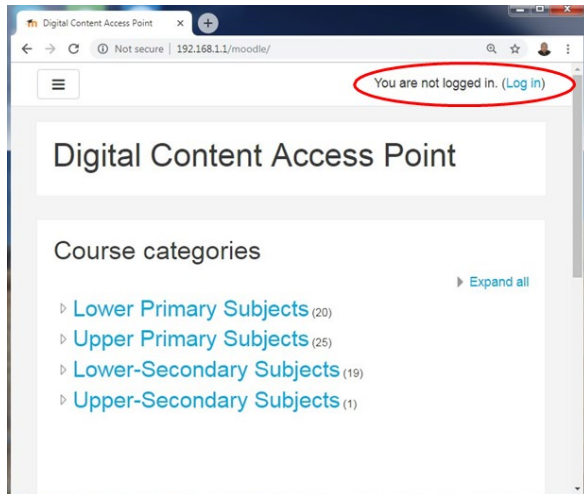


ii. Using gnome interface



7. 2. 2. Log into CAP

This step allows enrolled users to access the system through their own username and password and username and password must be personal. If you are not an admin, remember to login through the specific subject.



Note: For the first-time login, the default username is “**admin**” and Password is ***Admin1#**.

Click **Log in** or

Press Enter key from the keyboard

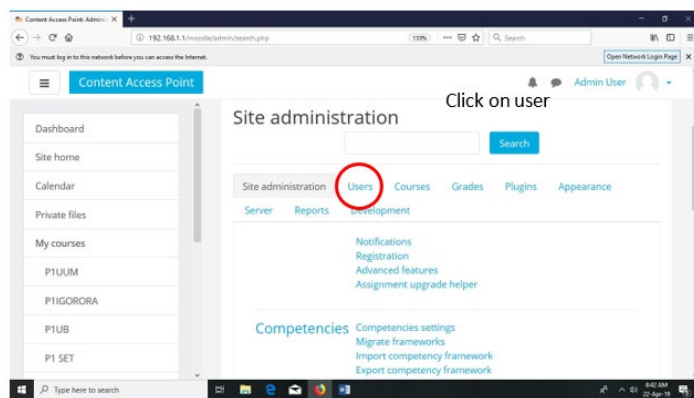
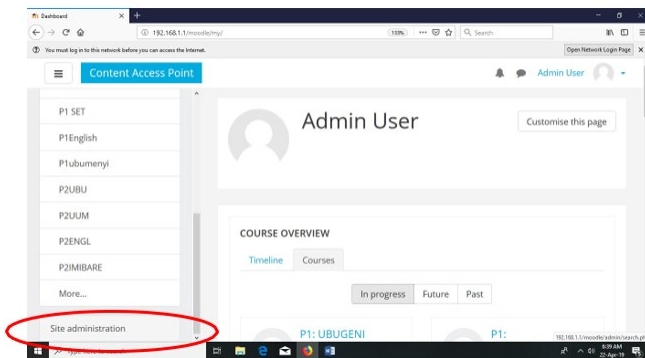
The content now opens and states whether the logged in user is an admin or not.

The admin user is the one allowed to add users.

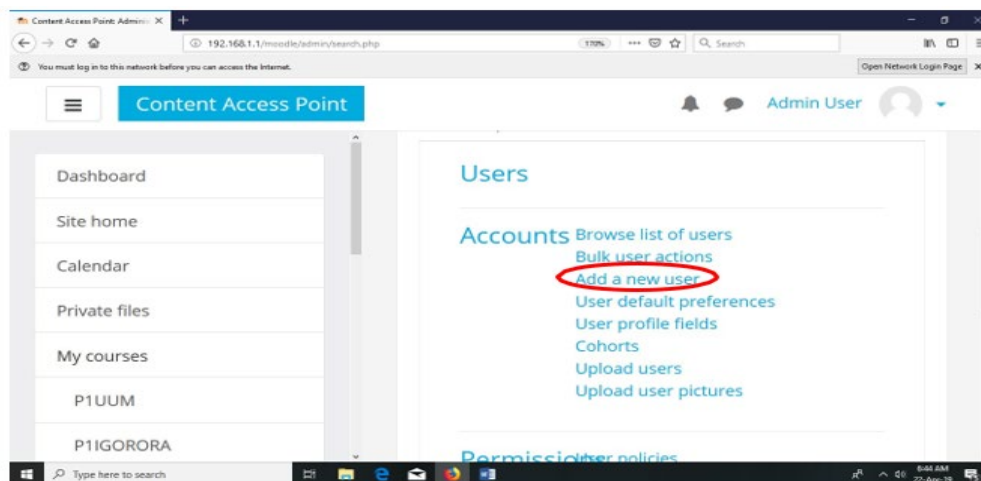
7.3 Add and enroll users

7.3.1 Add a new teacher

The admin user has the right to add other users. New users being Teachers or Students are added through the Administration site as follow:



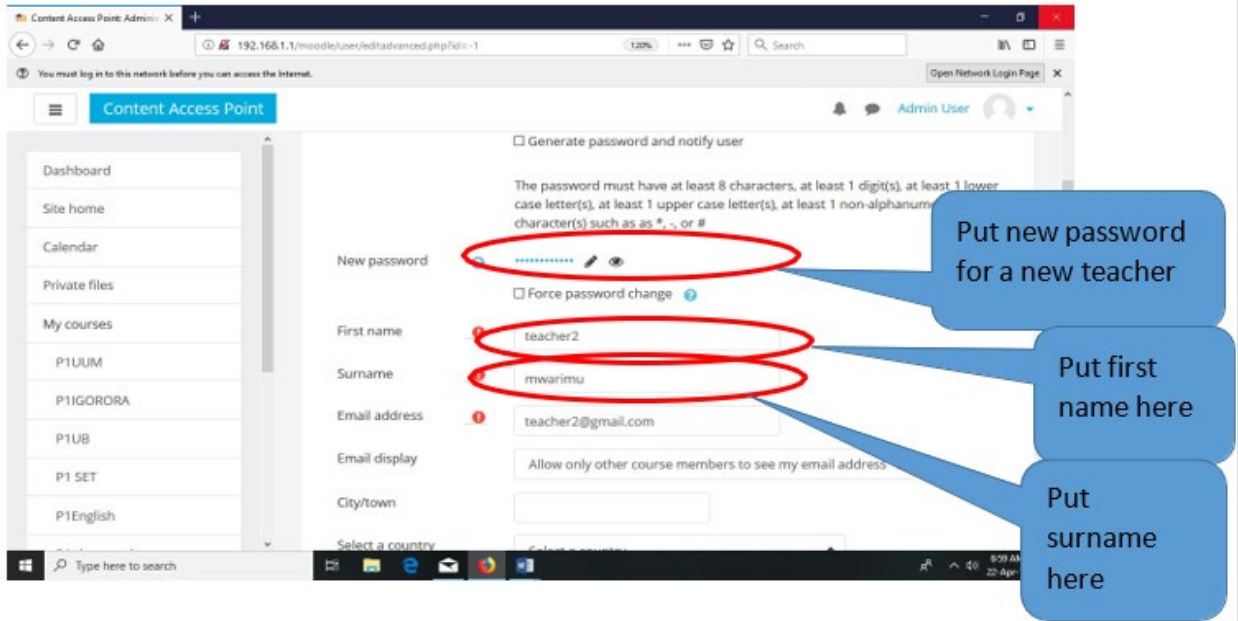
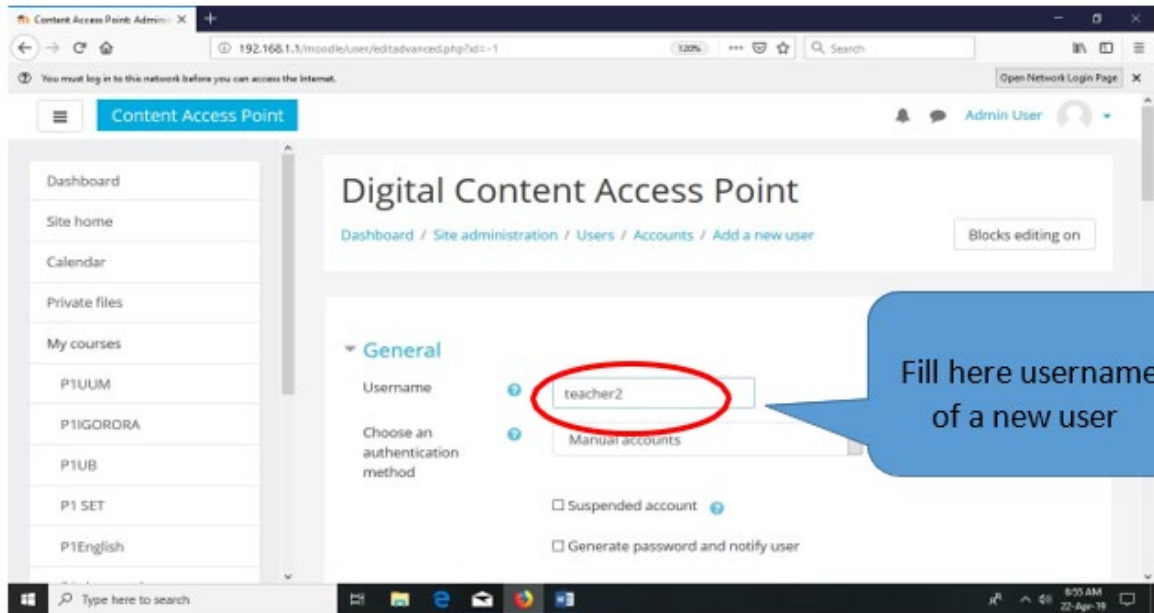
Click **Site administration**, choose **Users**



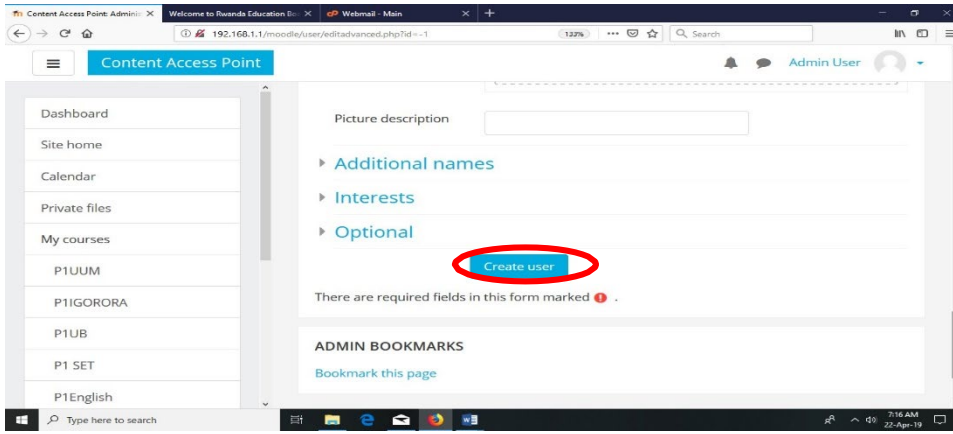
From the displayed list Choose Add new user

The new user registration requires the following details:

- ✓ Username, Password, First name, Surname
- ✓ Email address (not necessary a working one)
- ✓ The admin should use the easily remembered usernames and passwords.



Scroll down and Click Create user



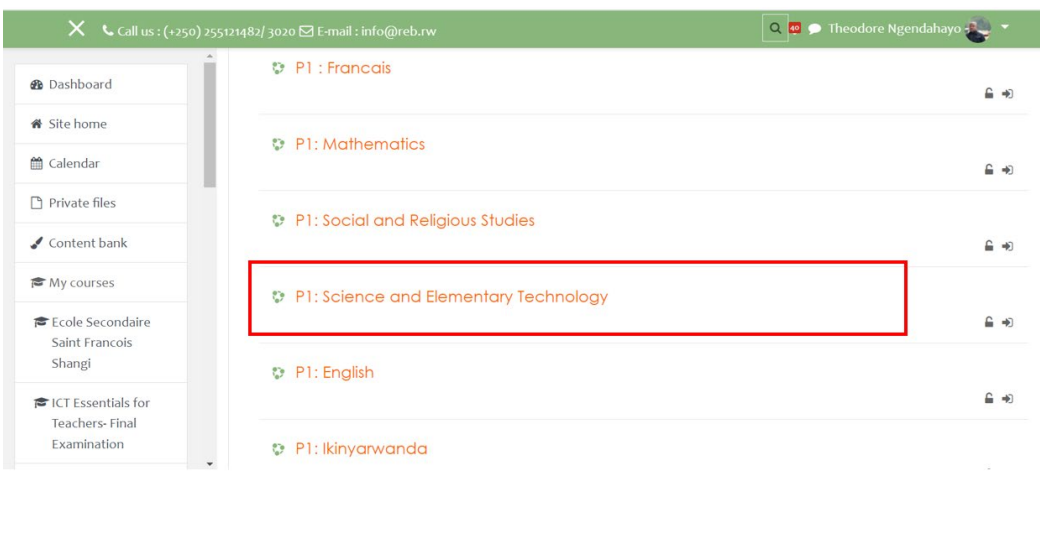
Note: once a teacher is added as new user, He / She is enrolled to a subject to have an access on it

7. 3. 2 Enroll a teacher to a course

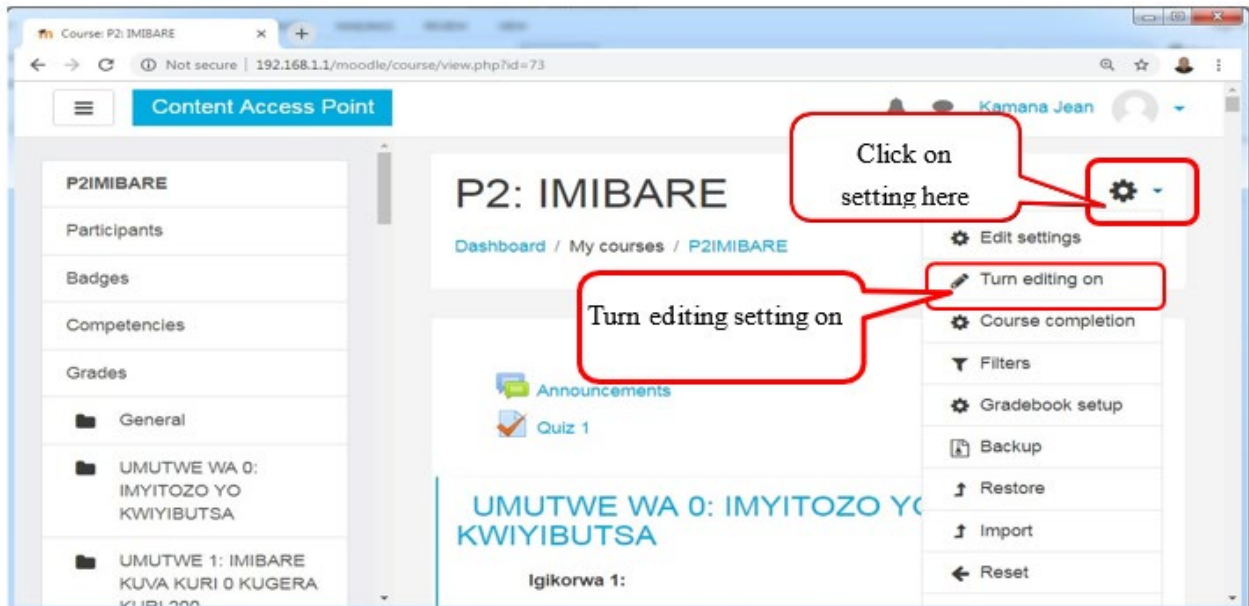
For a teacher to access the content of a certain subject, to be enrolled on the subject is a prime requirement, and this is done by the admin user. To do this the steps are:

1. Click the subject name from the list of courses displayed on the left side
2. Under the displayed list of operations, choose **Participants**
3. On the upright corner of the course content, click the **Action button**
4. Click **Enrolled users** button and Choose **Enroll users**
5. In front of the name of the user you want to enroll from the displayed list, Click **Enroll**

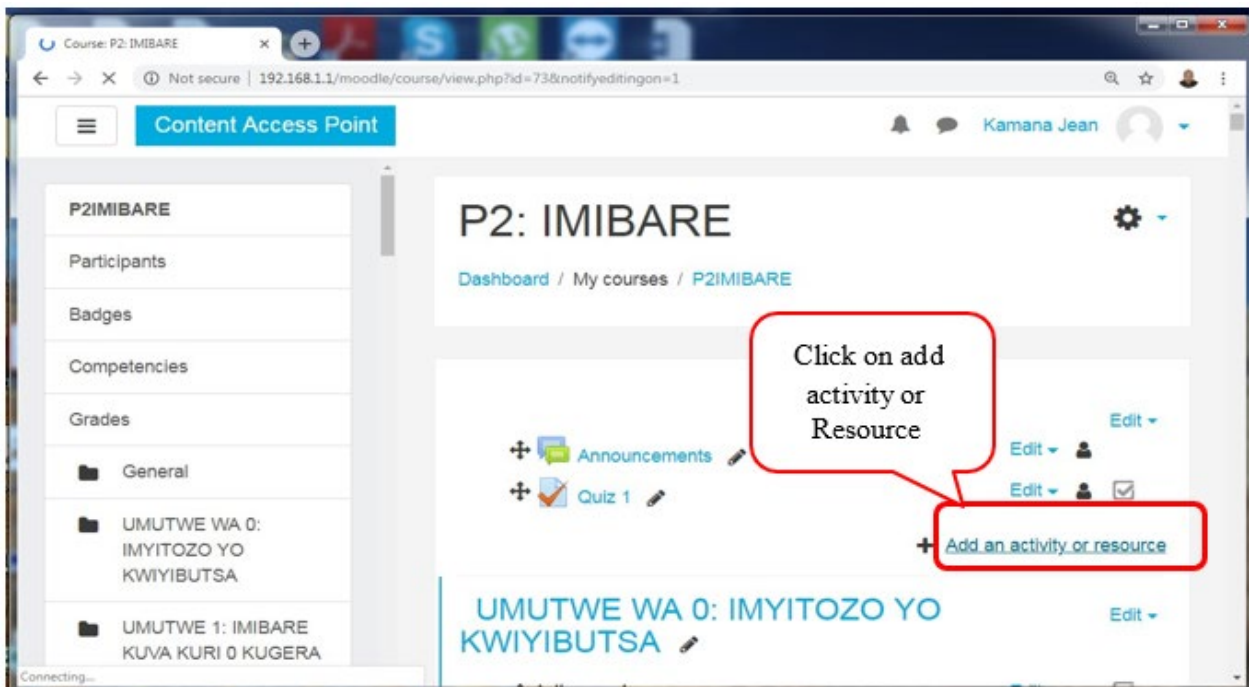
Step 1. Click the subject name from the list of courses displayed on the left side



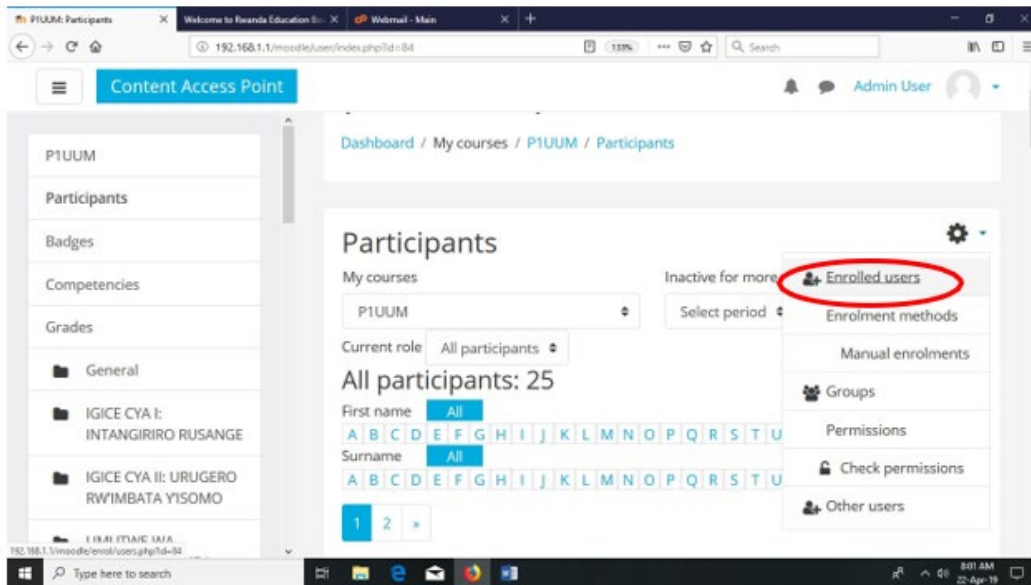
Step2. Under the displayed list of operations, choose Participants



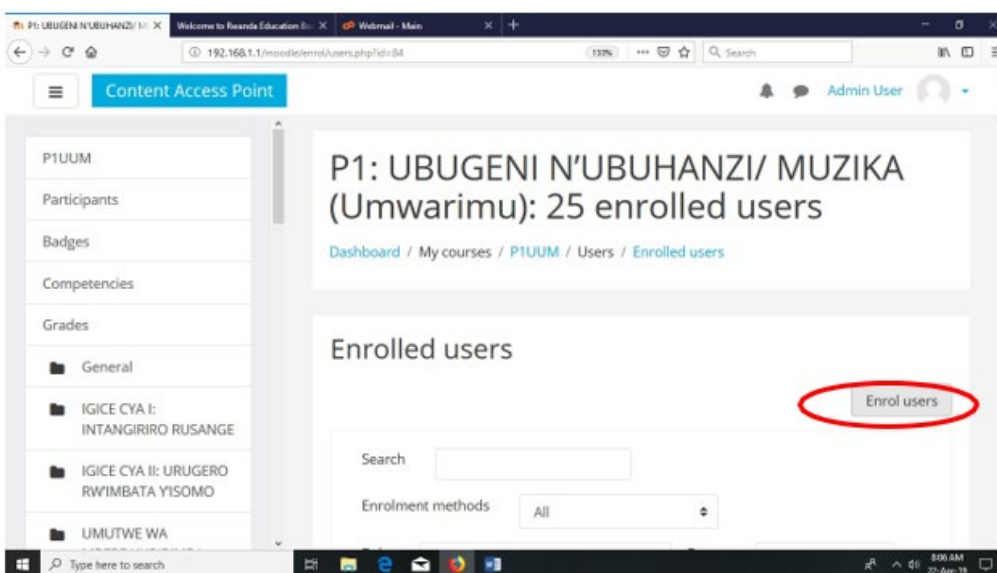
Step 3. On the upright corner of the course content, click the Action button



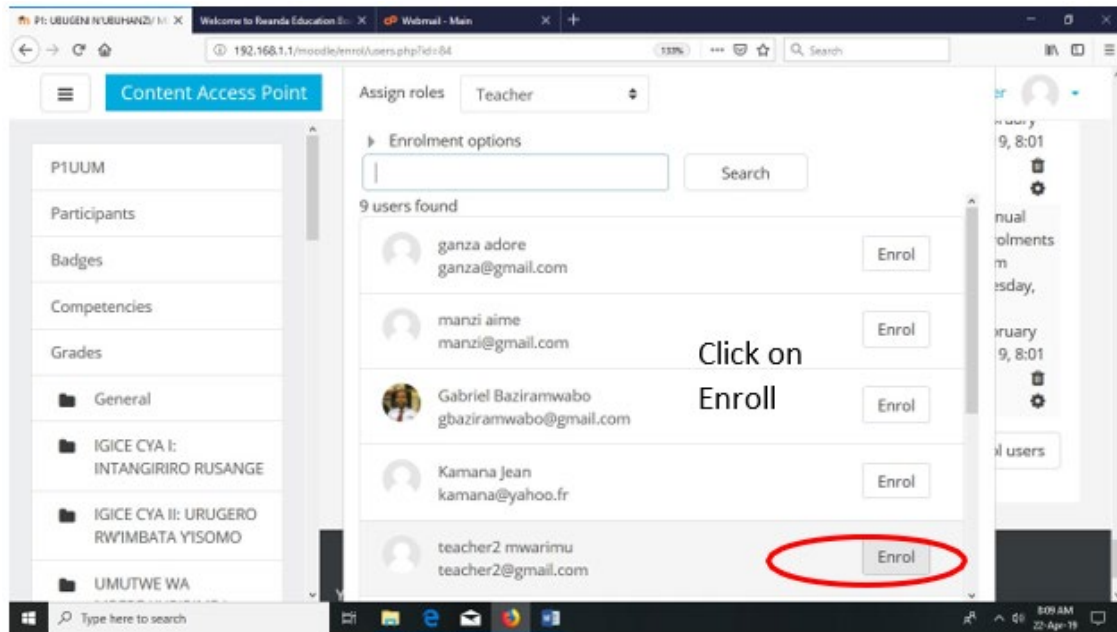
Step 4. Click **Enrolled users** button



Step 5. Click **Enroll users**



Step 6. In front of the name of name of the teacher you want to enroll, Click Enroll



7. 3. 3 Add Students

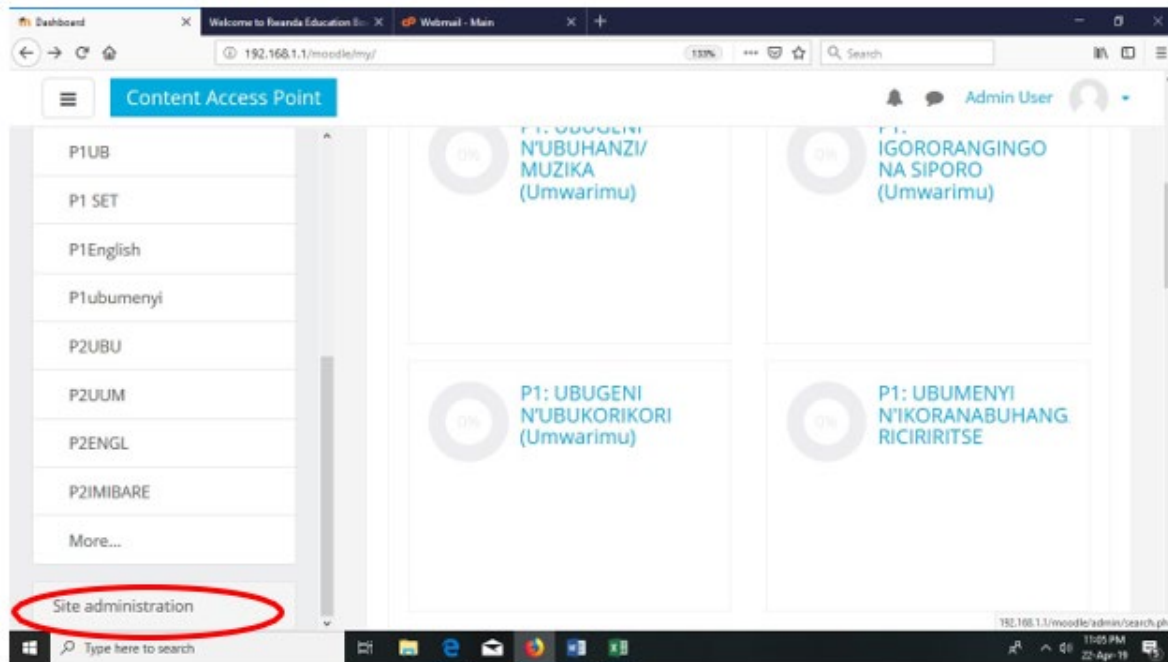
Requirement:

- ✓ Complete first the excel sheet for students
- ✓ Fill their username
- ✓ First name
- ✓ Last name
- ✓ Email
- ✓ Password
- ✓ Courses
- ✓ save as CSV format (MS-DOS)

The steps to add students are the following

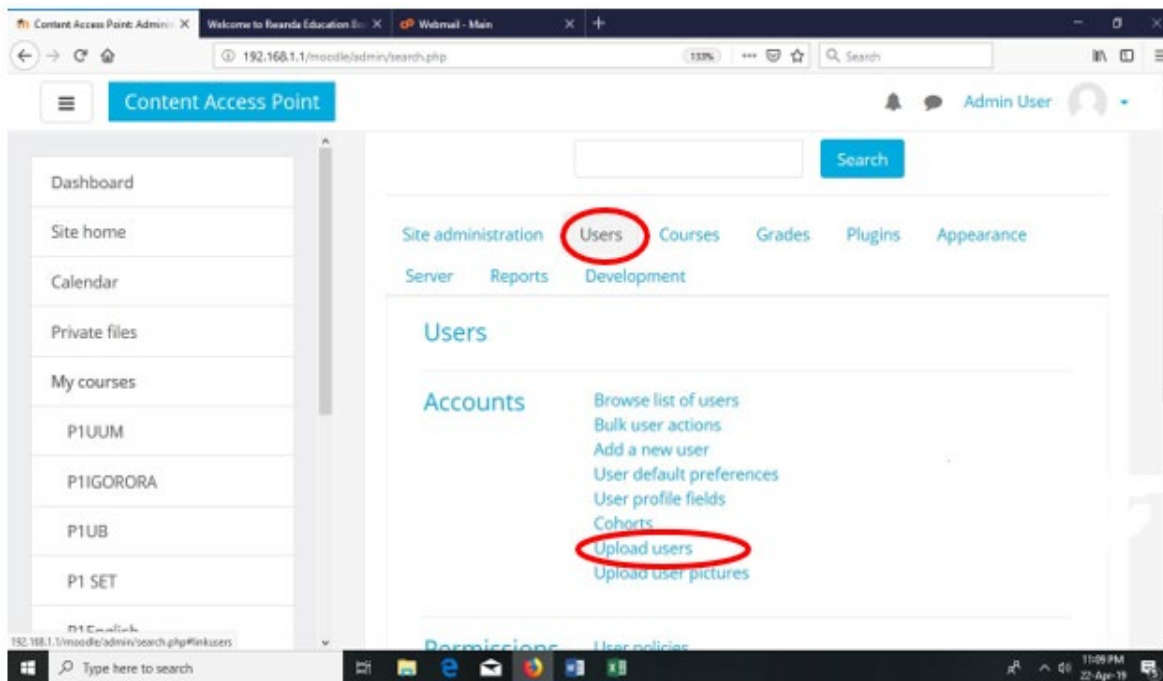
1. Click Site administrator
2. Choose Users
3. Click Upload users
4. Choose Upload File
5. Browse the file you save from its location
6. Click Upload this file
7. Click Upload user

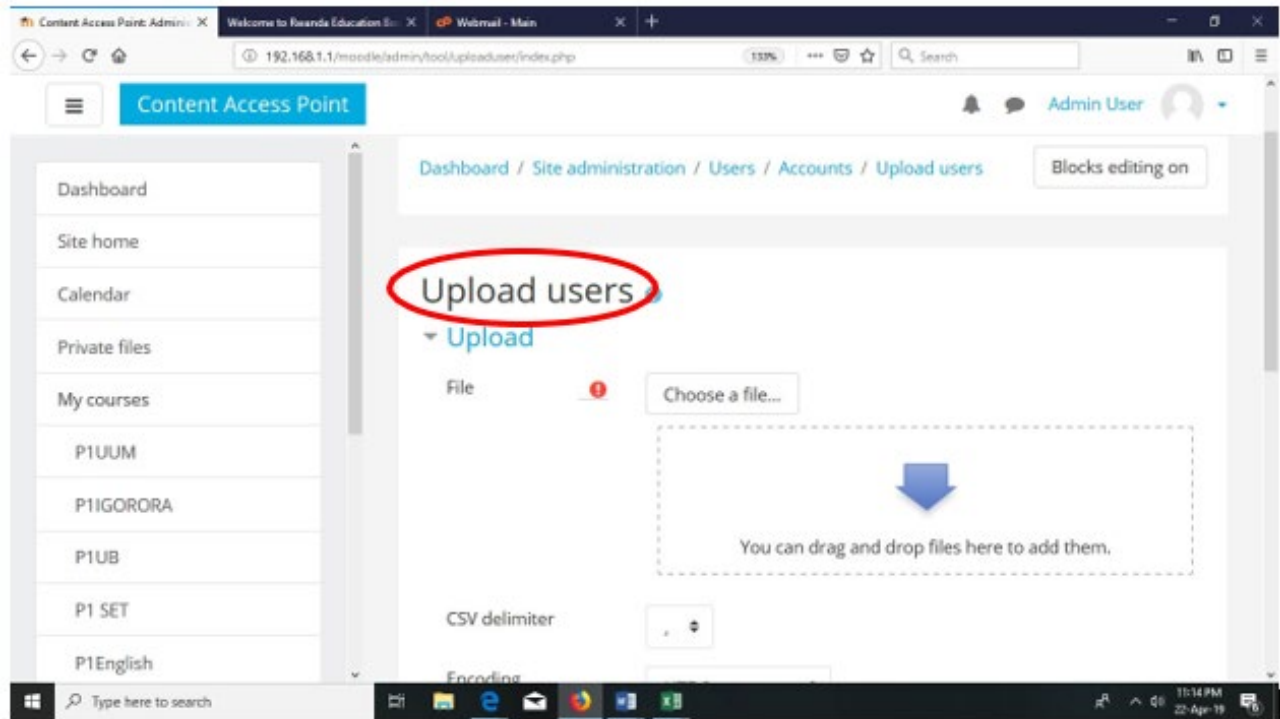
Step1. Click Site administration



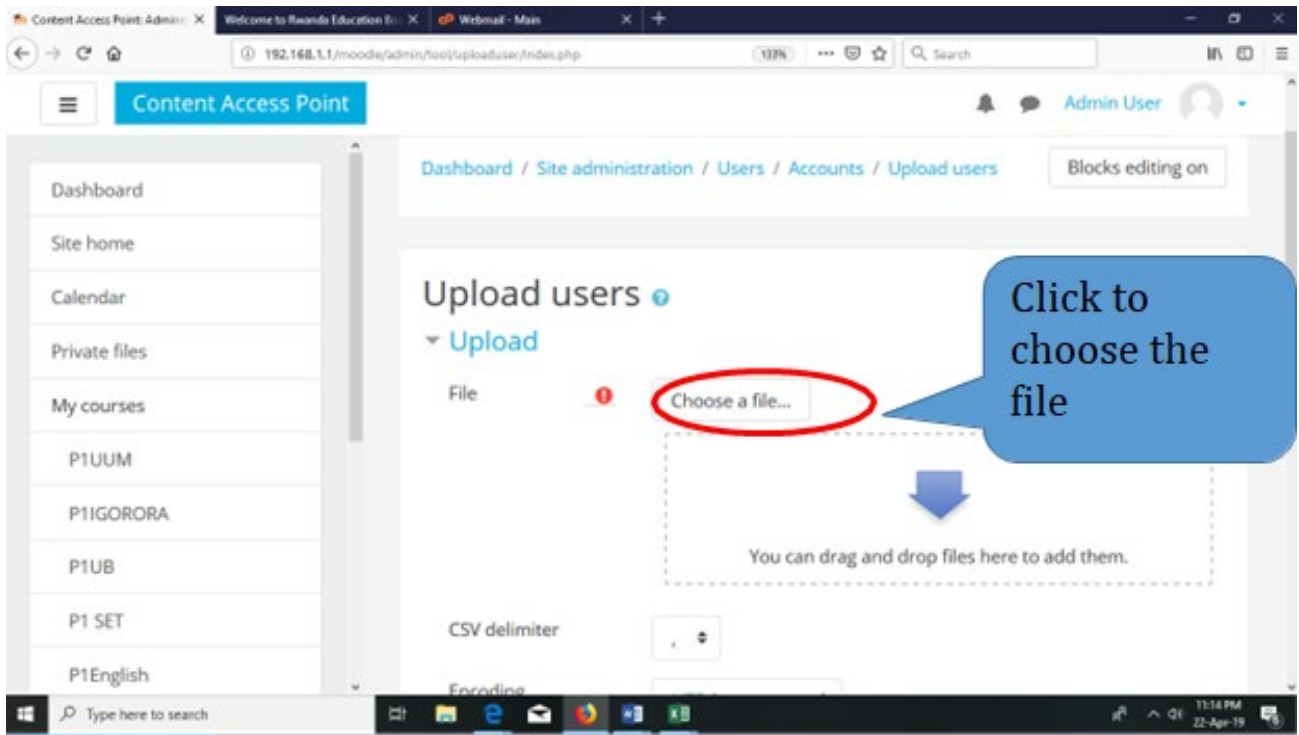
Step 2. Choose Users

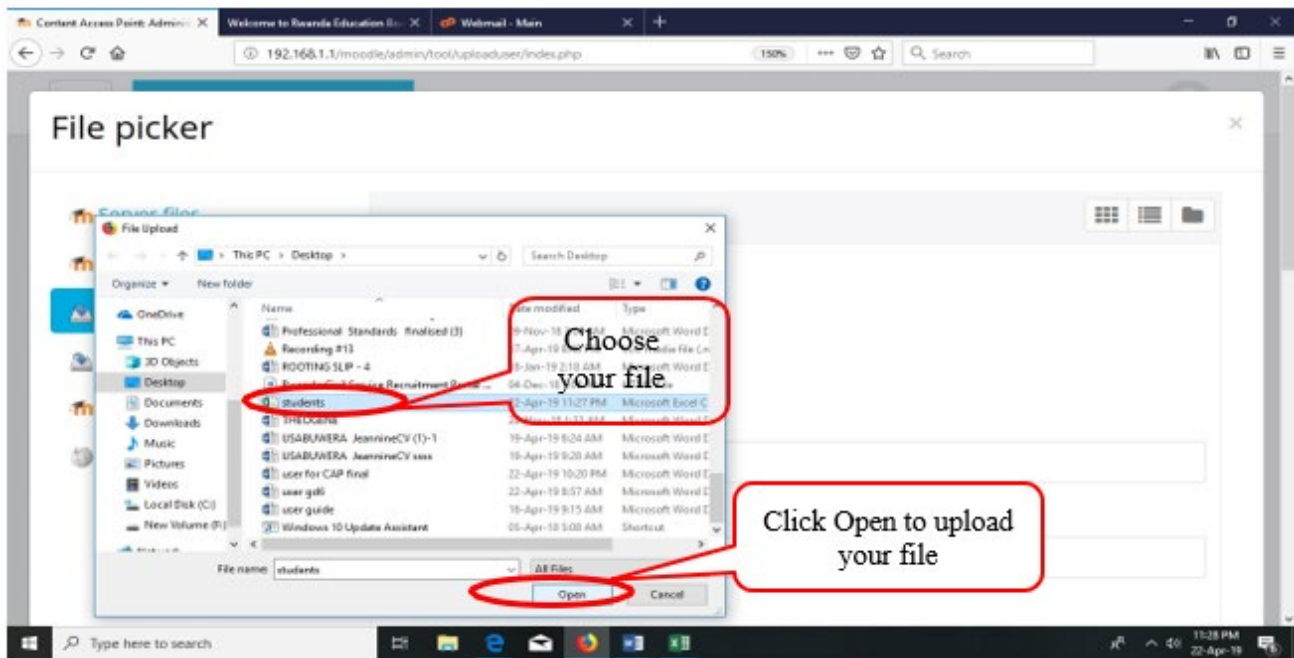
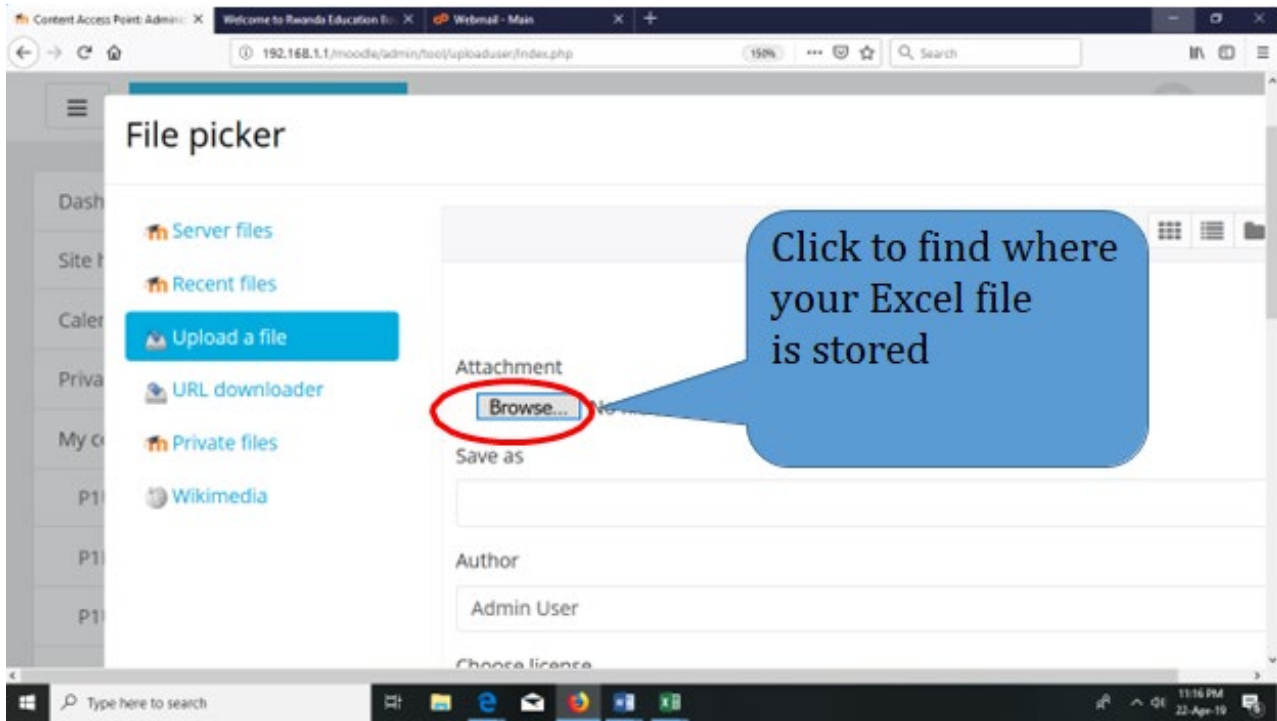
Step3. Click Upload users



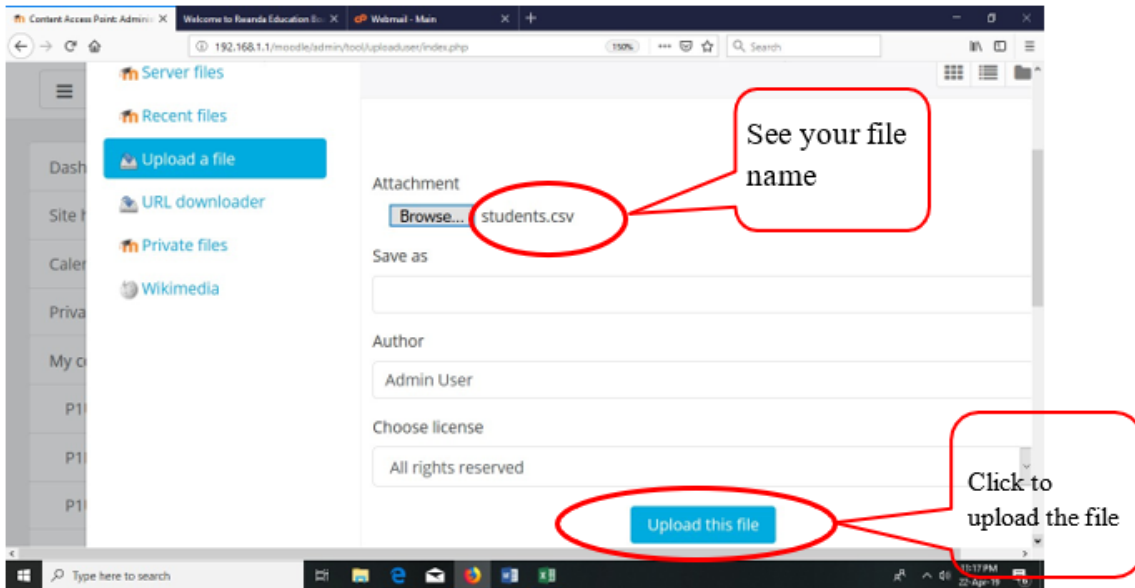


Step 5. Choose file from its location

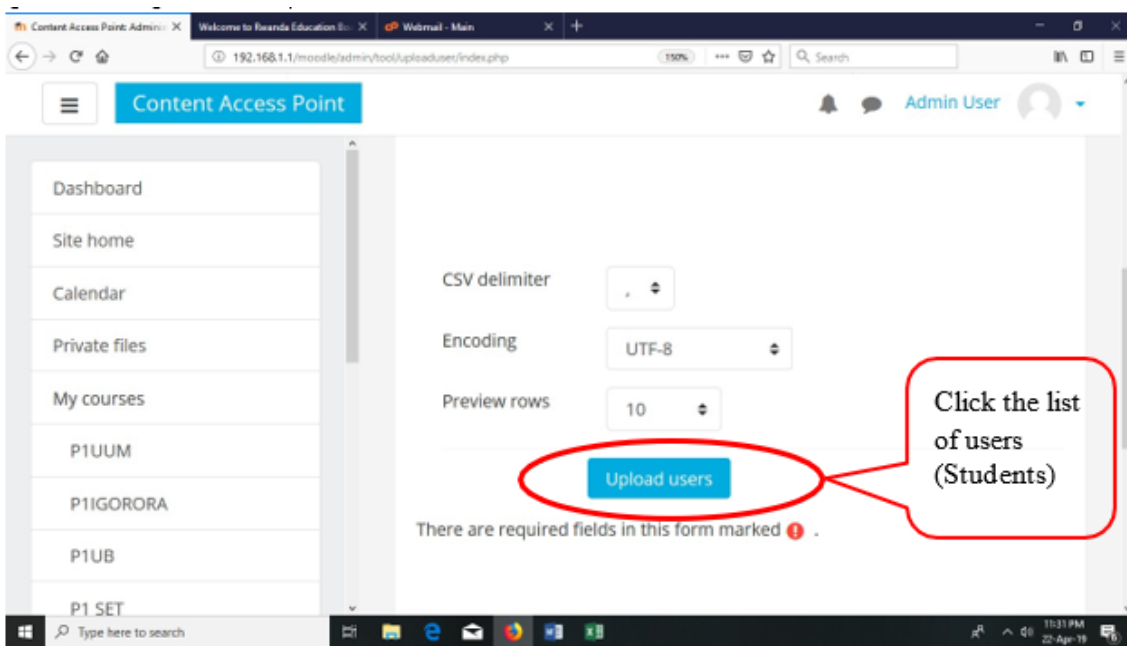


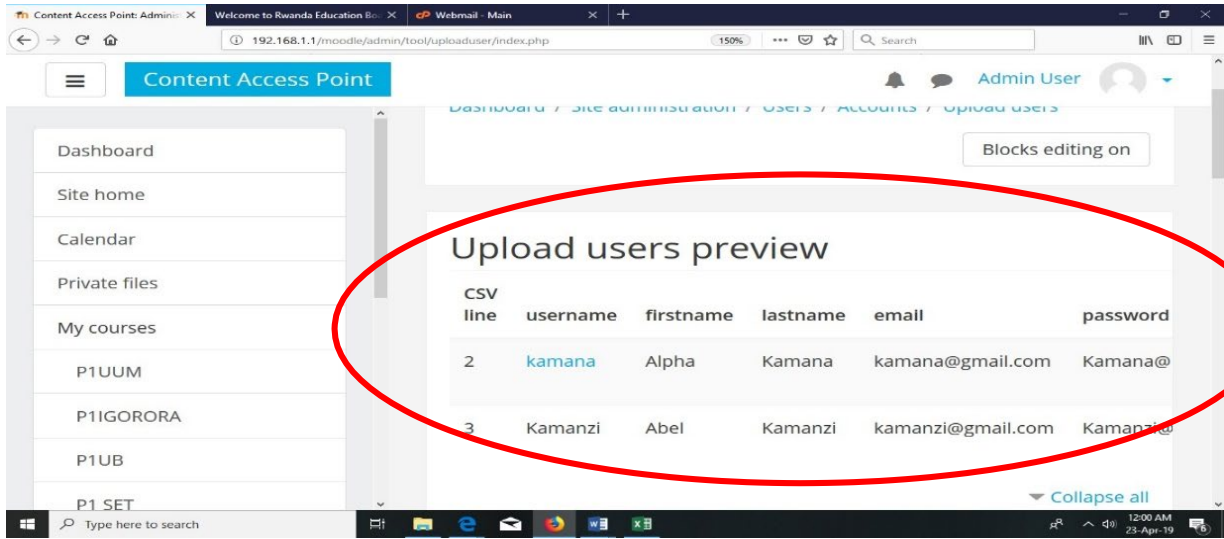


Step 6. Click Upload this file



Step 7. Click Upload Users





A list of uploaded students displays for a preview.

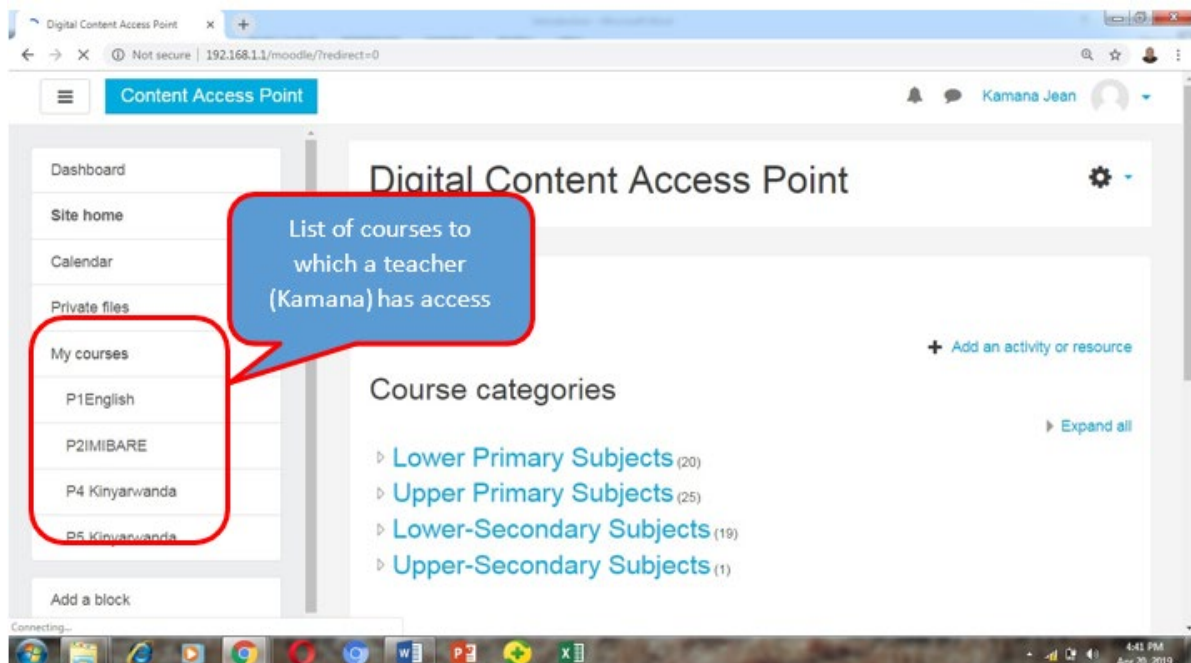
7. 4. Adding a quiz

7. 4. 1 Quiz setting

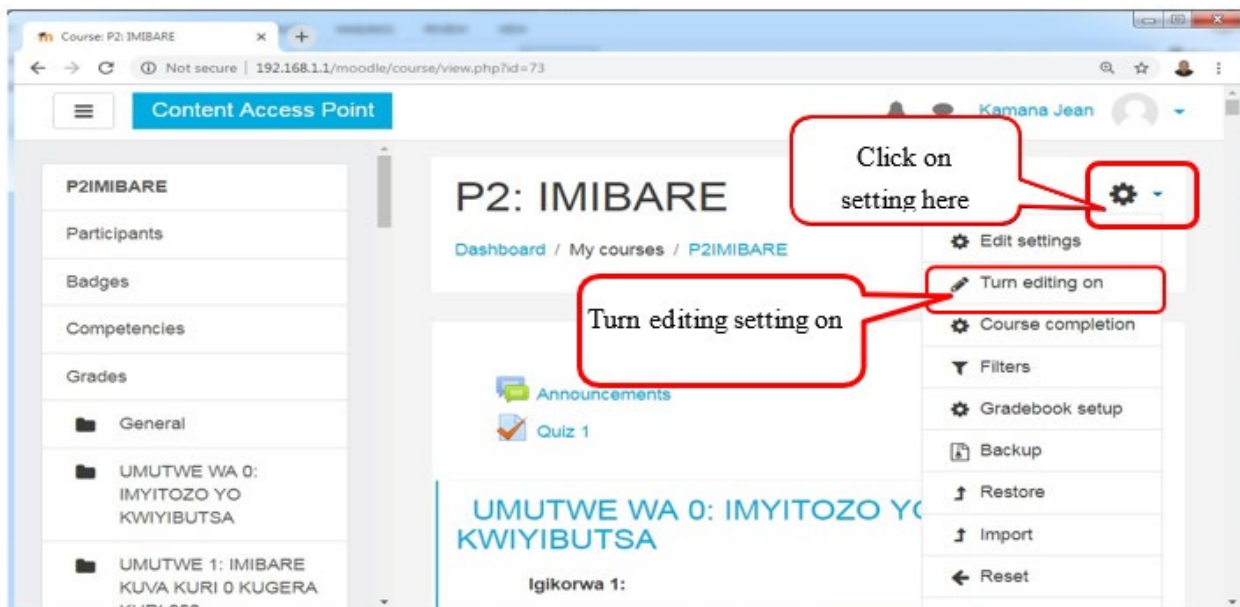
For a course to which a teacher is having an access, He / She may also add an assignment or a quiz for the student to attempt. To do this a teacher:

<ol style="list-style-type: none">1. Opens the subject2. From the subject editing, Turns on editing3. Clicks Add an activity or resource4. Choose Quiz or Assignment5. Click the Add button6. Set the name of the quiz	<ol style="list-style-type: none">7. Schedule the quiz time8. Set the Pass mark9. State the number of attempts allowed10. Set the number of pages per questions11. Click Save and Display button
--	---

Step 1. Opens the subject



Step 2. From the subject editing, Turn on editing

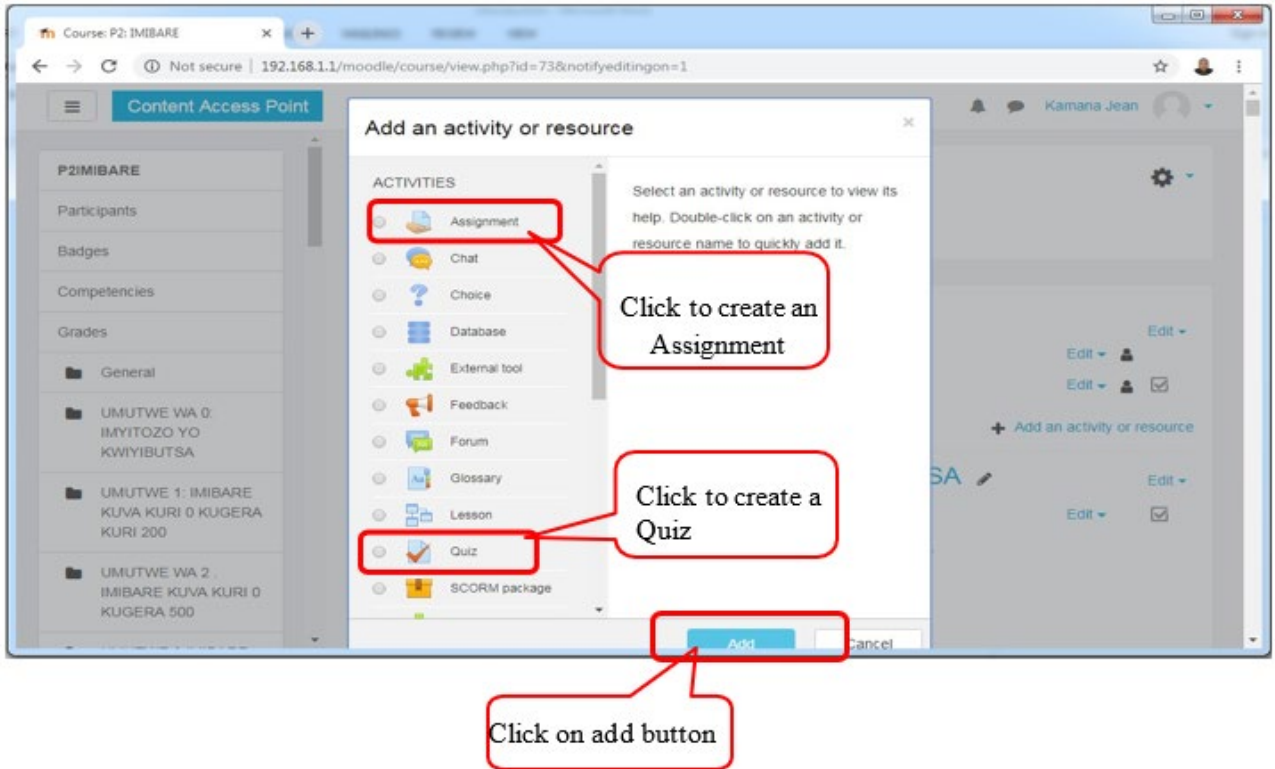


Step 3. Click Add an activity or resource

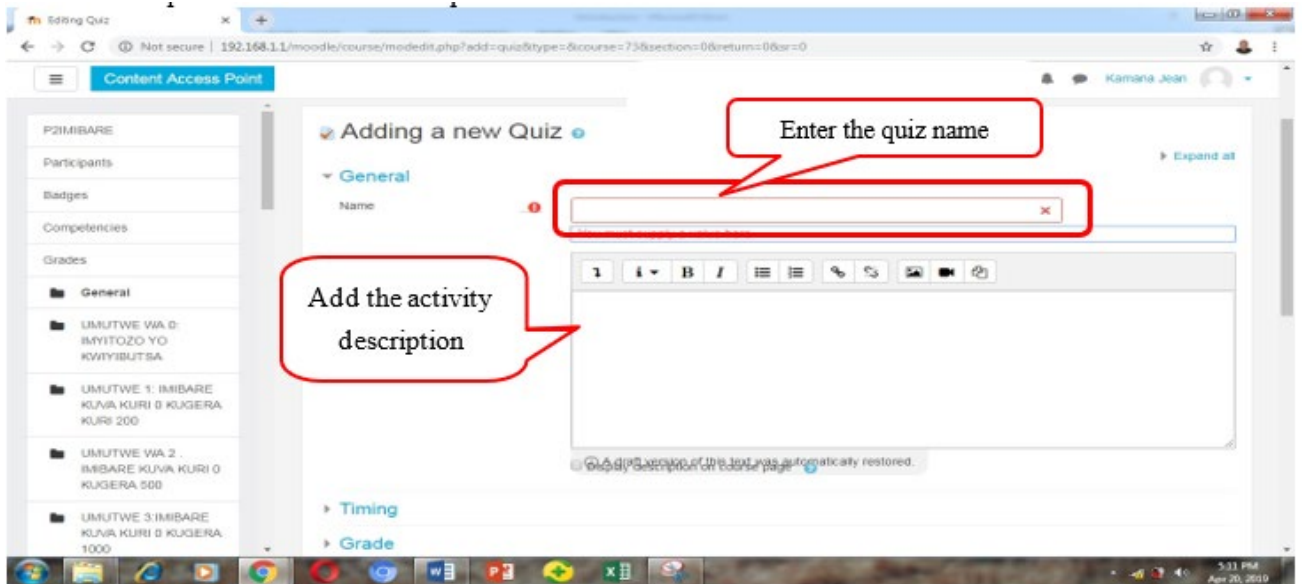


Then after clicking on add an activity or resource the list of activities and resources it opens

Step 4. Choose Quiz



Step 6. Set the name of the quiz

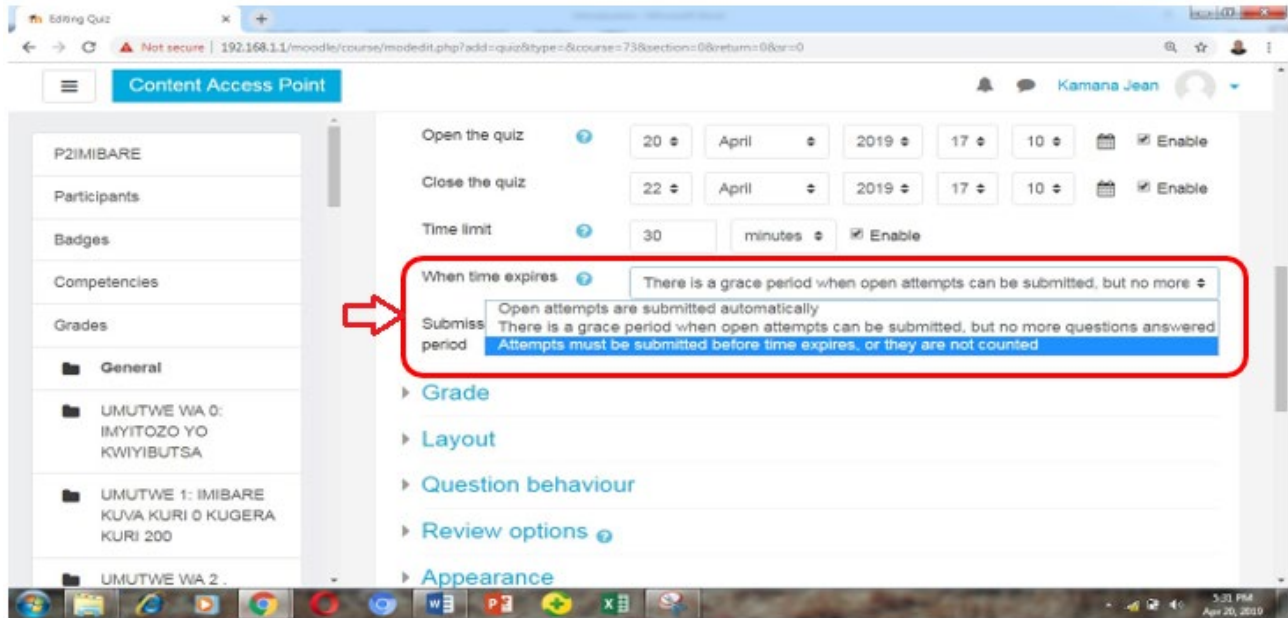


The setting allows you to make the assessment available for a set period of time.

Step 7. Set the time of the quiz

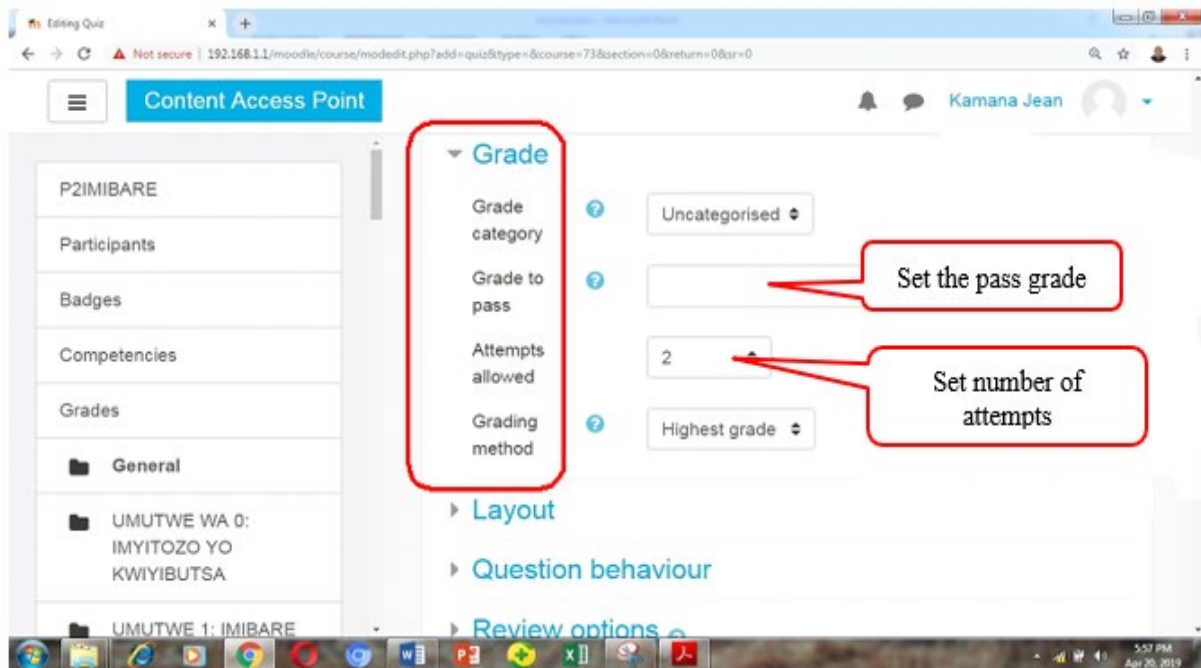
The screenshot shows the Moodle quiz editing interface. The 'Timing' section is highlighted with a red box. The 'Open the quiz' field is set to 20 April 2019 17:10. The 'Close the quiz' field is set to 22 April 2019 17:10. The 'Time limit' is set to 0 minutes. The 'When time expires' dropdown is set to 'Open attempts are submitted automatically'. The 'Submission grace period' is also set to 'Open attempts are submitted automatically'. A red callout bubble points to the 'Open the quiz' field with the text 'Set the activity starting'. Another red callout bubble points to the 'Close the quiz' field with the text 'Set the activity ending date and time'.

The screenshot shows the Moodle quiz editing interface, focusing on the 'Time limit' field. The 'Time limit' is set to 0 minutes. A red callout bubble points to the 'Time limit' field with the text 'Set the duration time'. The 'When time expires' dropdown is set to 'Open attempts are submitted automatically'. The 'Submission grace period' is also set to 'Open attempts are submitted automatically'.

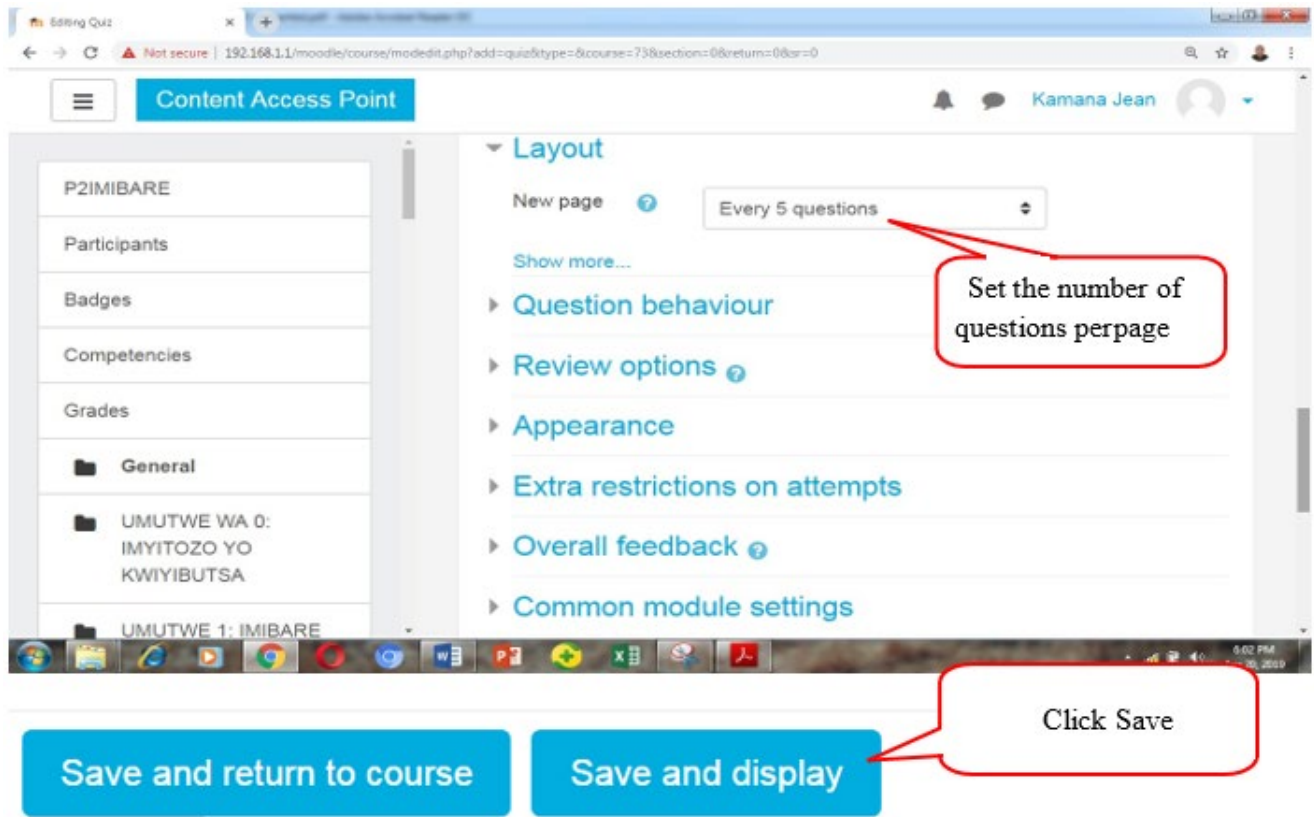


The When time expires option (click 'show more' to see it) is used to determine how the quiz will behave if the time expires

Step 8. Set the pass mark and number of allowed attempts



Step 9. Set pages per question and save the work

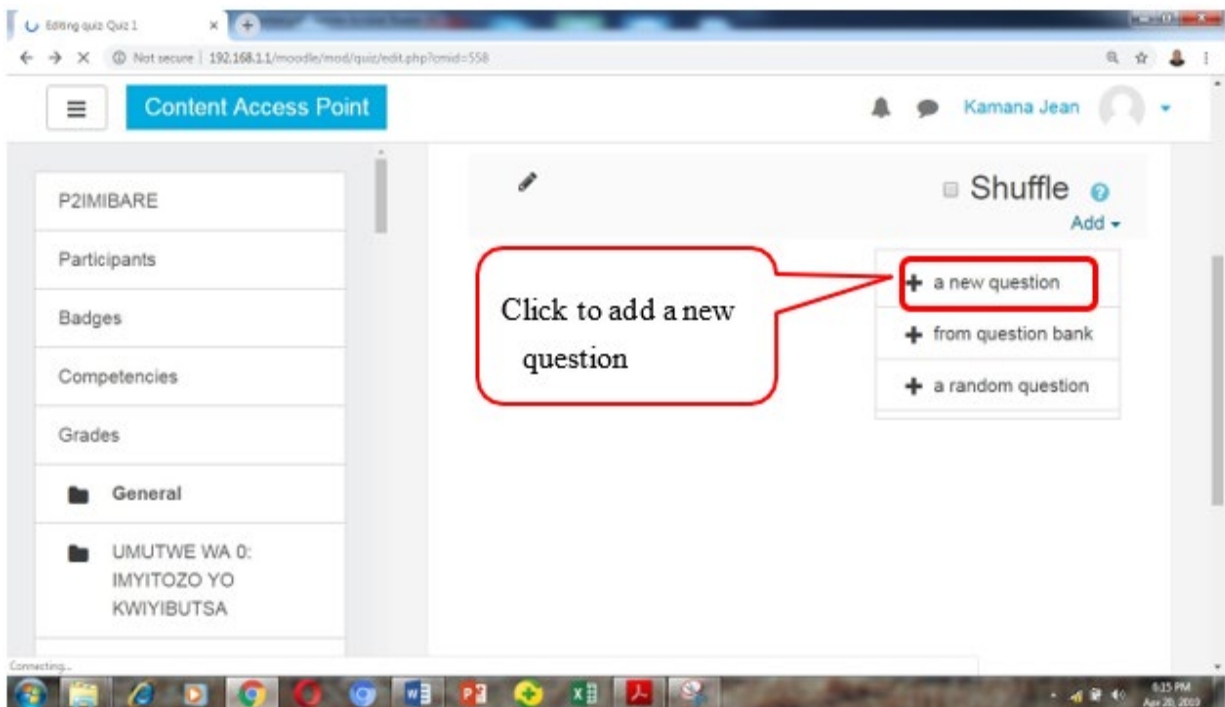
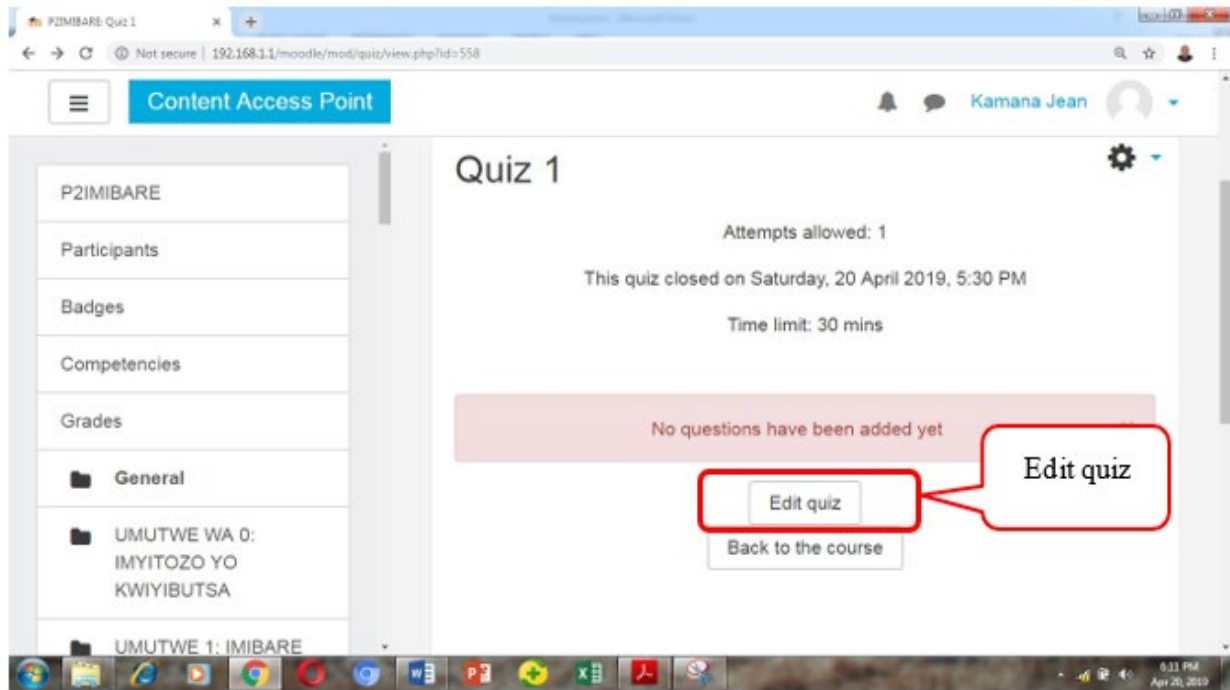


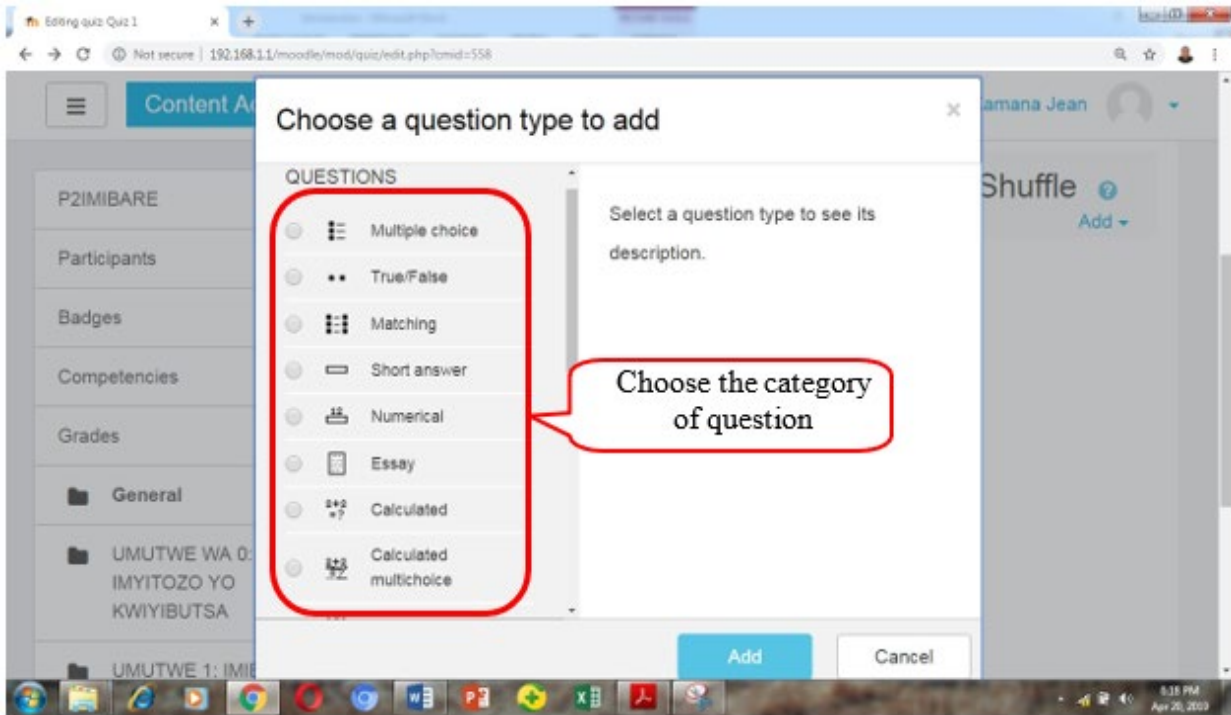
7. 4. 2 Add question to the quiz

A quiz once it is uploaded, a teacher is still having the possibility to add some questions when needed by:

1. Click on the quiz name
2. Choose Edit quiz
3. Click Add button
4. Choose a new question
5. Set the question category
6. Type the question
7. Click Add butt







7.5. Practice

ACTIVITY 7

Using administrator credentials, Login to CAP

See and download SET P5 course, and save it on any location of your choice

Register two users and enroll them to different subjects.

E.g., Kalisa - Math P1 and Ntwali - SET P5

MODULE 8. INTRODUCTION TO OFFICE 365

8.1 General overview

Microsoft Office lets you create, share and collaborate all in one place with your favorite Microsoft apps all in one intuitive platform. Teachers and students get access to the best tools for learning anywhere in the classroom, remotely or in a blended environment for free, which empowers your students and teachers to achieve more. This all educators to:

Access anywhere, anytime the provided apps and create equitable learning environments that help students to develop knowledge and skills essential for both academic and career success.

Give the students tools to learn and collaborate on project together and independently, all in one place, to connect and achieve more together whether in classroom, at home or around the globe

Academic goal



Become more comfortable using Office 365.

Learn how to use Office 365 tools to inspire, collaborate, engage, and communicate more effectively in the classroom.

Learn how to enable both students and educators to experience more dynamic learning in the classroom

Benefits of Office 356 in education?

Office 365 is a staple set of tools for educators, it includes education specific functionality such as classroom notebooks in OneNote and educator-specific collaboration tools in Teams, assessment and communication tools.

Microsoft O365 gives schools, teachers, and parents all the resources they need to move to a remote classroom with confidence. It is accessible on either mobile, tablet, PC or browser

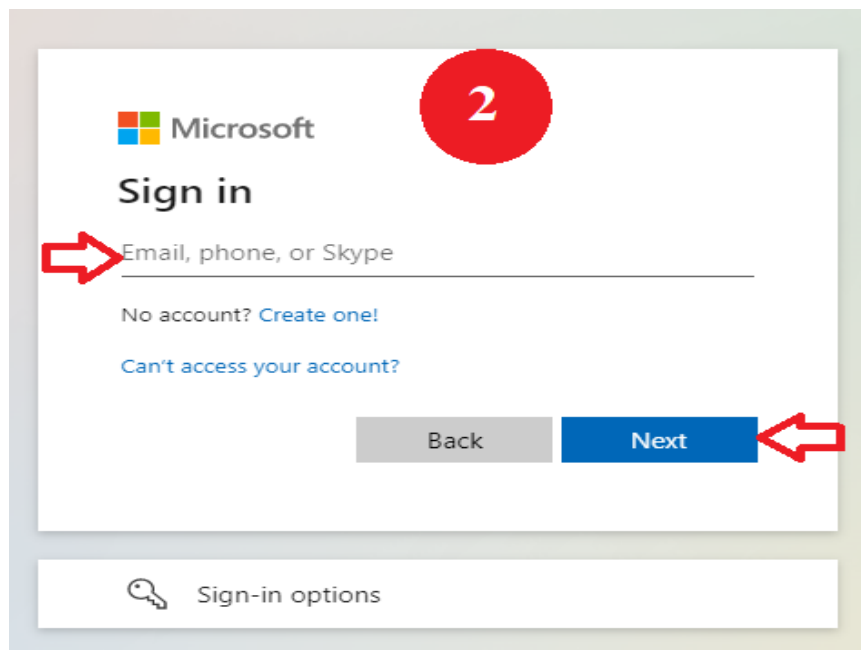
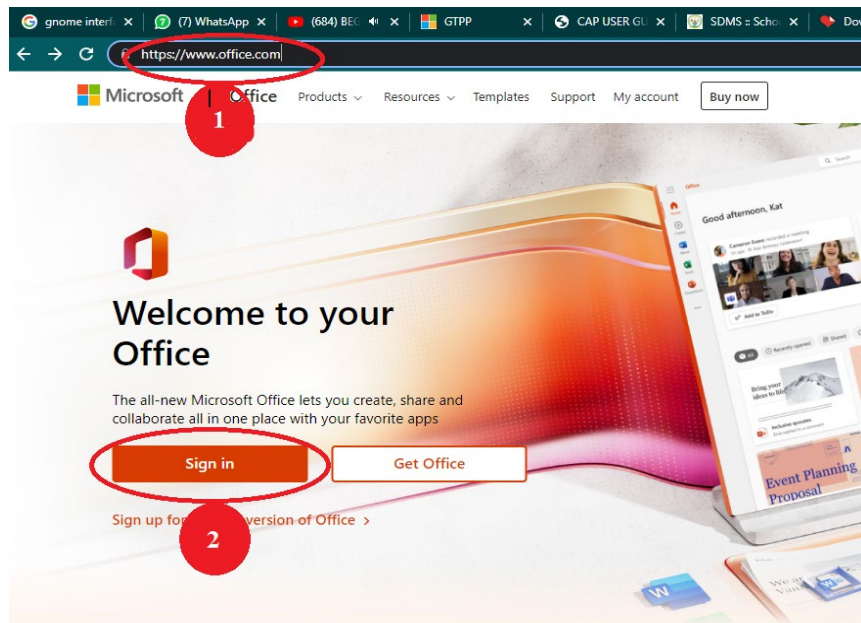
8.2 Get started with office 365

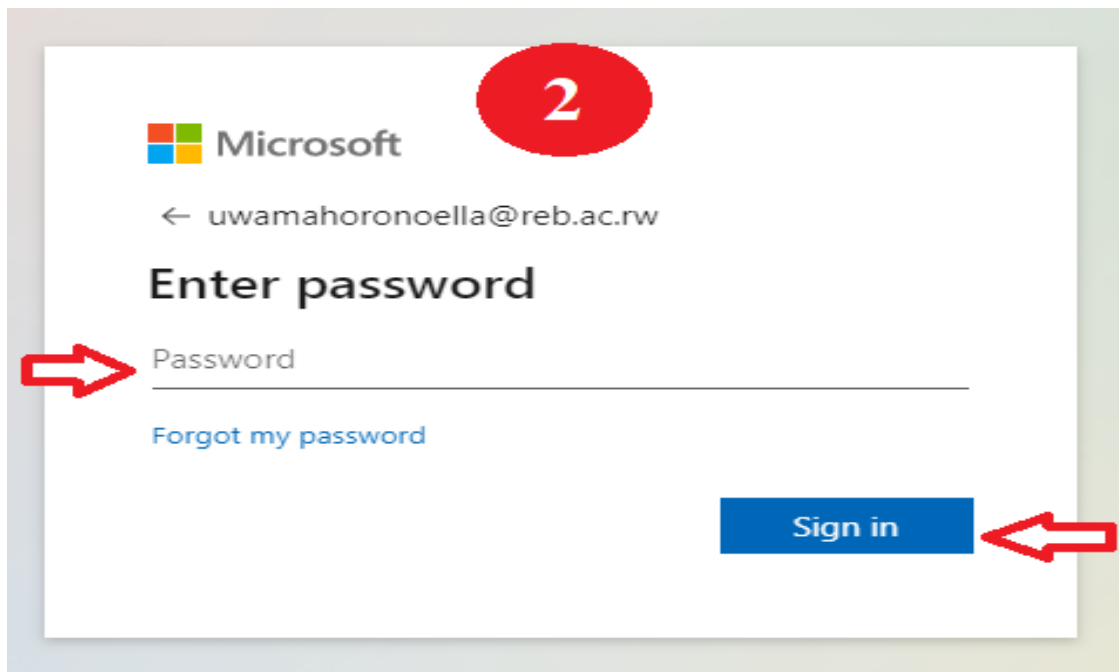
8.2.1 Log into Office 365

Open your browser and navigate to: www.office.com

Use your Microsoft account credentials (email and Password) to log in.

Choose to stay signed in if you are using your device, and **no** if you are using other's device





2

Microsoft

← uwamahoronoella@reb.ac.rw

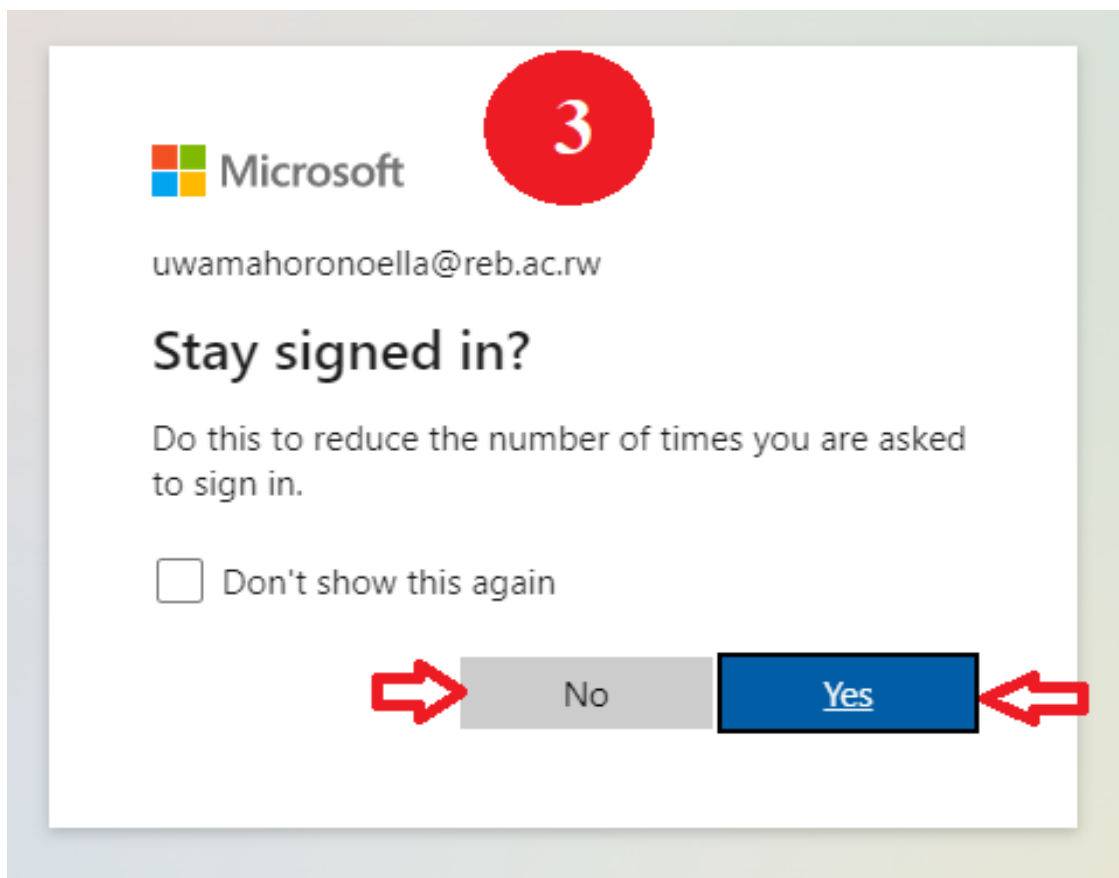
Enter password

Password

[Forgot my password](#)

Sign in

This screenshot shows the Microsoft sign-in page. A red circle with the number '2' is in the top right. The Microsoft logo is in the top left. Below it is the email address 'uwamahoronoella@reb.ac.rw'. The main heading is 'Enter password'. There is a text input field labeled 'Password' with a red arrow pointing to it from the left. Below the input field is a blue link 'Forgot my password'. At the bottom right is a blue 'Sign in' button with a red arrow pointing to it from the right.



3

Microsoft

uwamahoronoella@reb.ac.rw

Stay signed in?

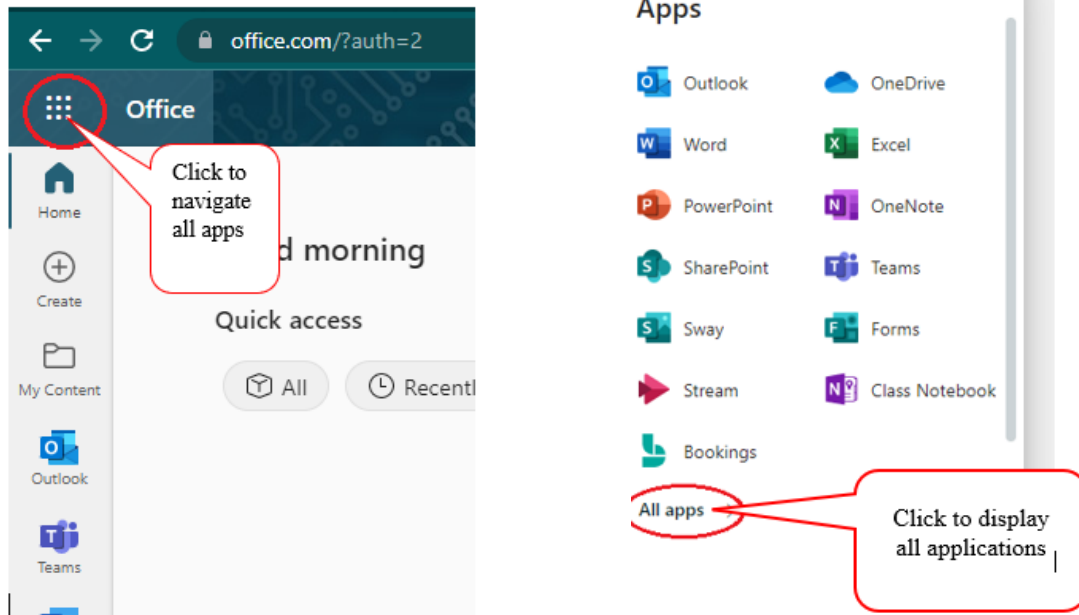
Do this to reduce the number of times you are asked to sign in.

Don't show this again

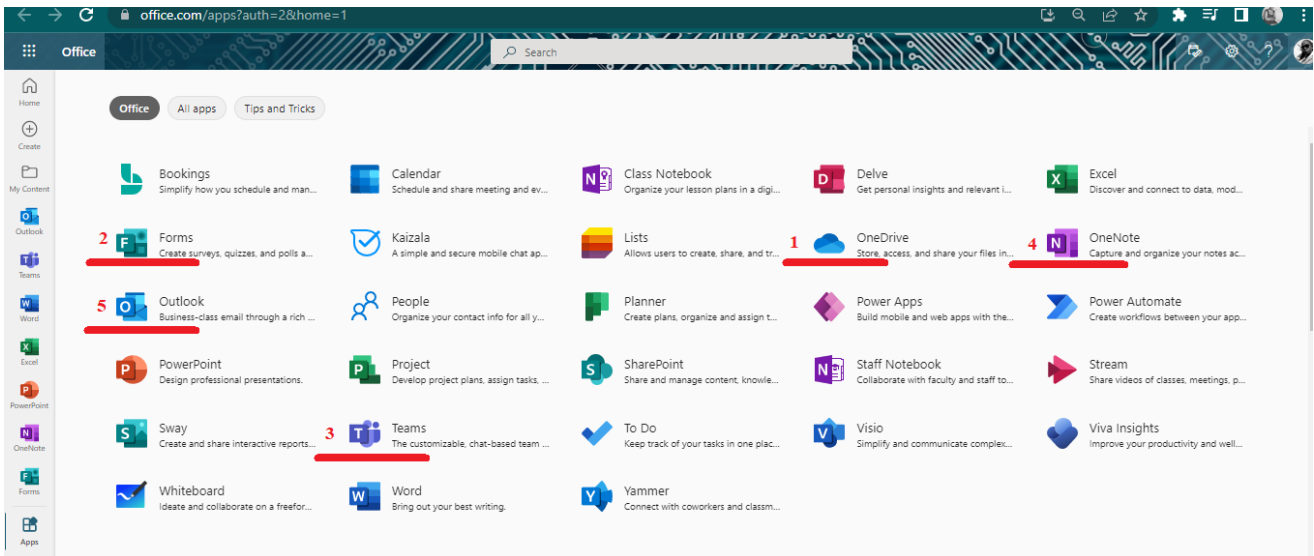
No Yes

This screenshot shows a 'Stay signed in?' dialog box. A red circle with the number '3' is in the top right. The Microsoft logo is in the top left. Below it is the email address 'uwamahoronoella@reb.ac.rw'. The main heading is 'Stay signed in?'. Below the heading is the text 'Do this to reduce the number of times you are asked to sign in.'. There is a checkbox labeled 'Don't show this again'. At the bottom are two buttons: a grey 'No' button with a red arrow pointing to it from the left, and a blue 'Yes' button with a red arrow pointing to it from the right.

8.2.2 Access some of office 365 Applications



All applications provided by the Office 365 platform are displayed under “All apps” button and are described with their full feature set. In this topic we shall discuss on OneDrive, Forms, Teams, OneNote and Outlook.



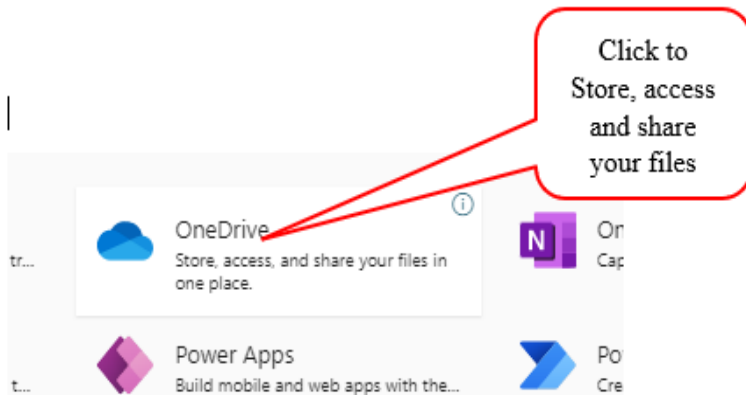
Practical exercise: docs.microsoft.com/en-us/training/modules/what-is-m365/7-knowledge-check

a. **Microsoft OneDrive**

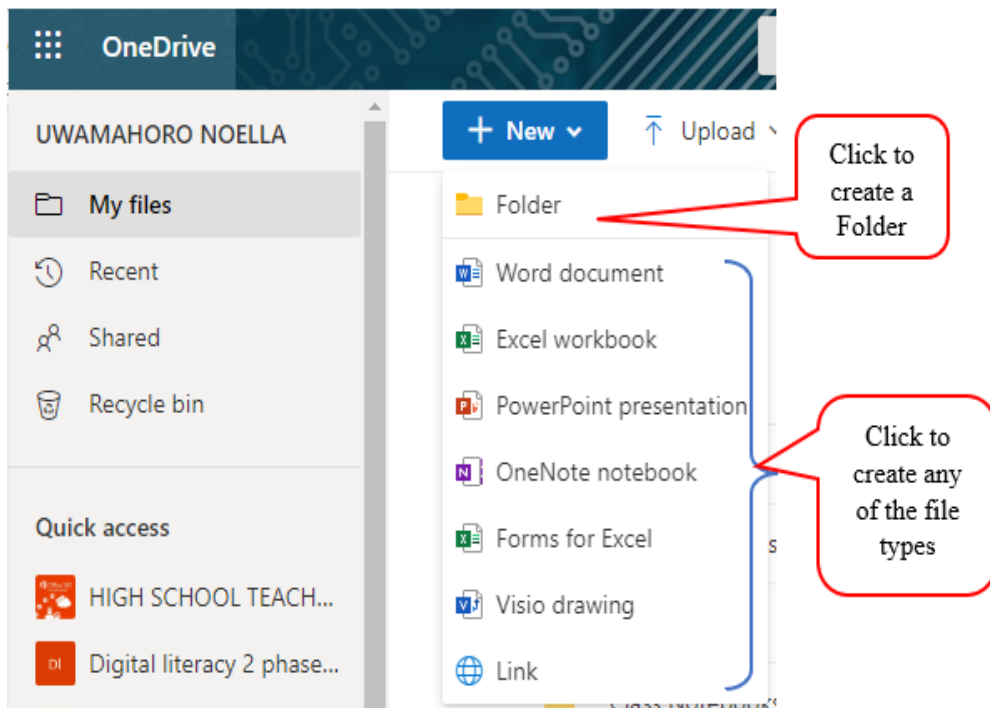
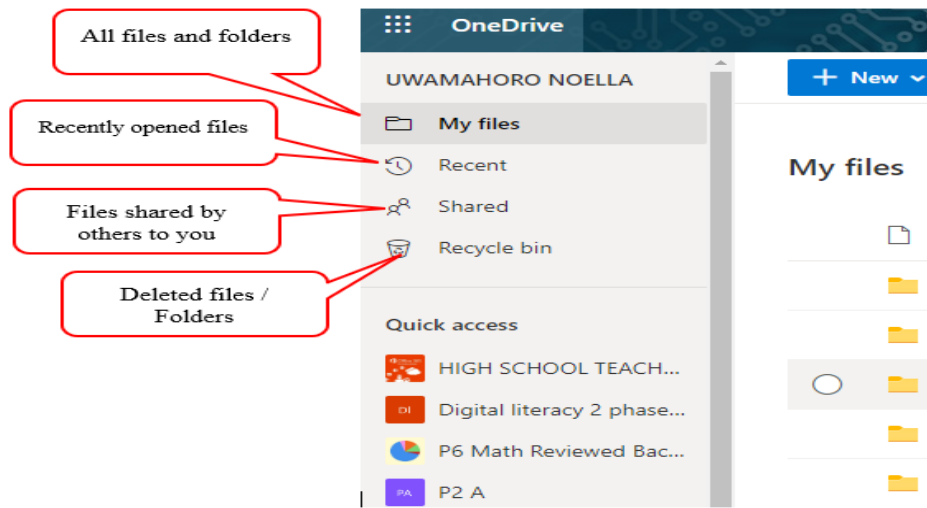


Use OneDrive to save documents, photos, and other files in the cloud, share them with friends, and even collaborate on content. When you subscribe to Microsoft 365, you get one Terabyte (1Tb) of storage and premium OneDrive features. OneDrive for work or school is online storage for your work or school organization.

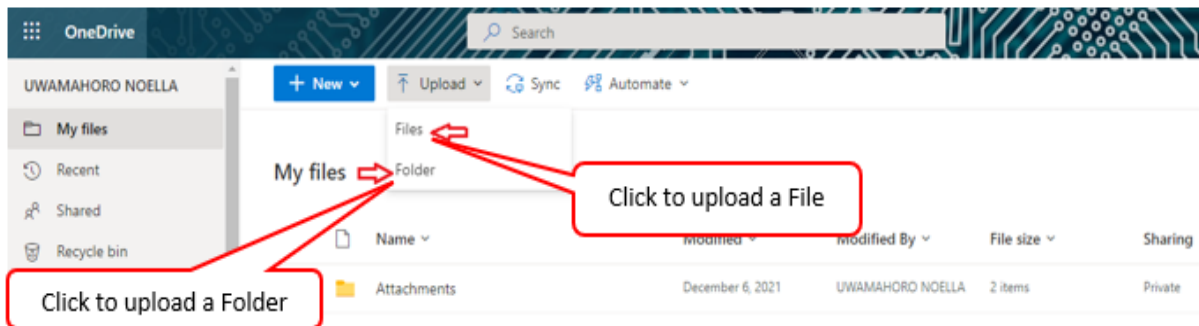
With OneDrive you can save work from any application to your cloud storage directly, without having to go to a website. That includes apps that autosave files.



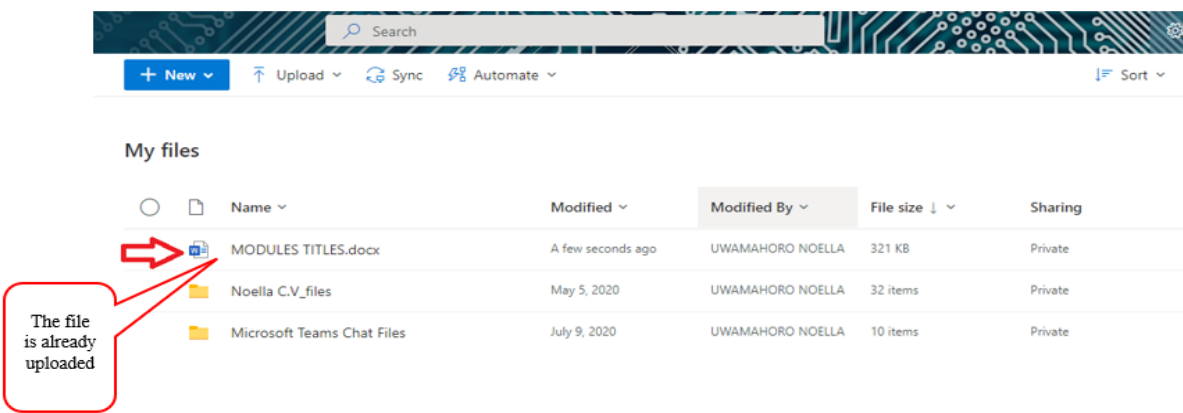
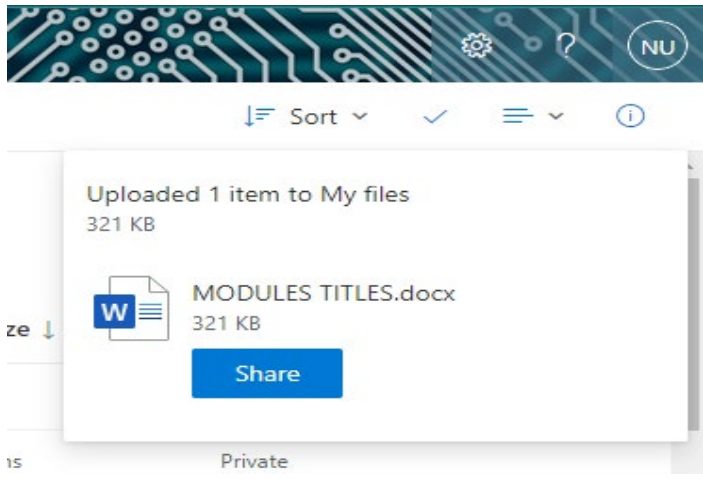
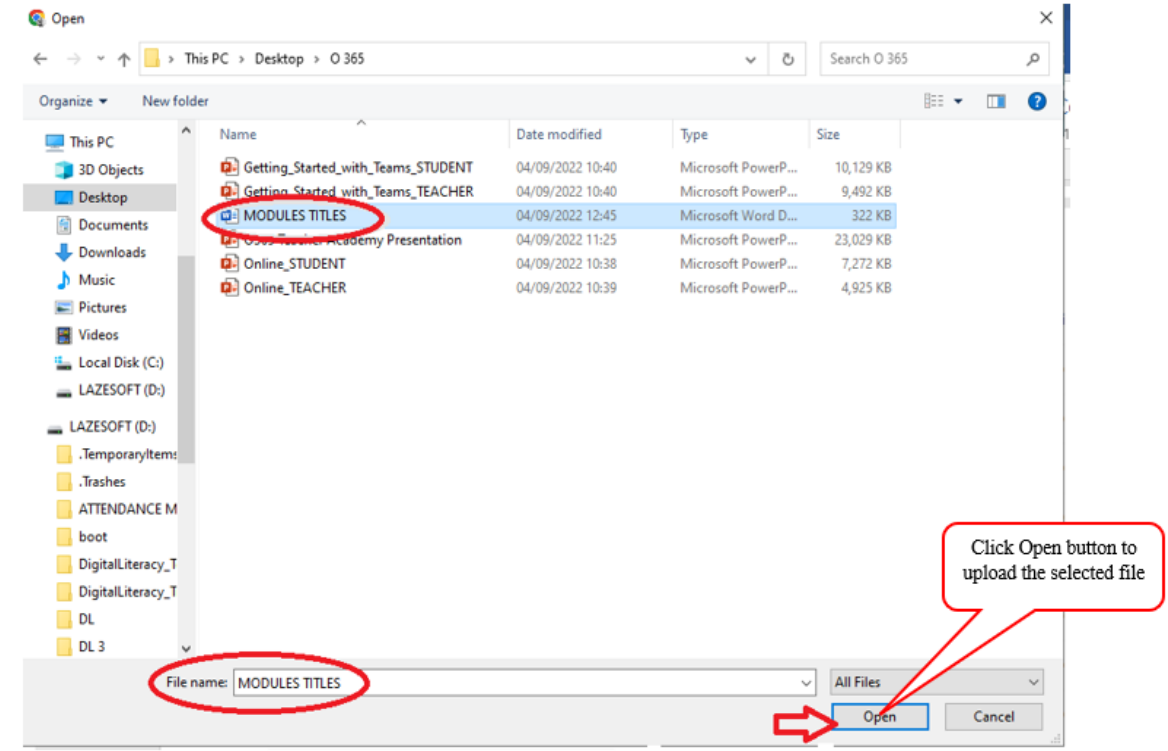
OneDrive main labels: Files or folders as created, uploaded, shared and deleted are grouped together as labeled and to create a file on OneDrive we pass through the **New** button.



To upload an already created document, we pass through the “Upload” button



Browse the file location to upload the file

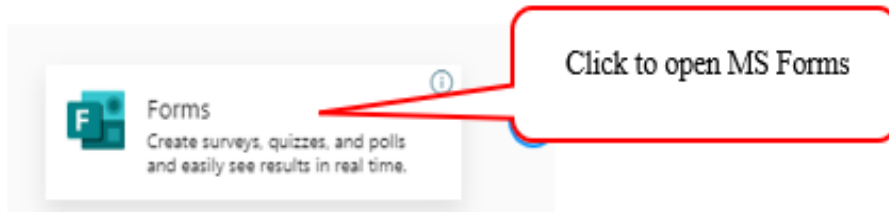


Practical exercise: <https://docs.microsoft.com/en-us/training/modules/m365-onedrive-collaboration-use/summary-knowledge-check>

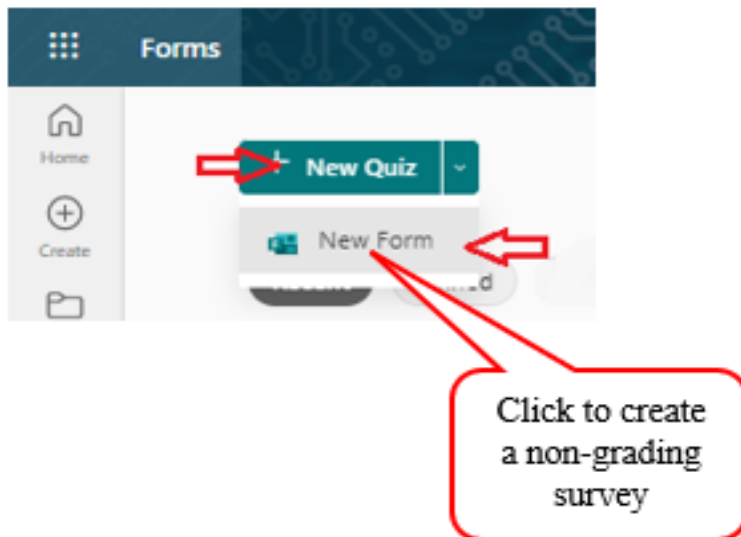
b. Microsoft Forms

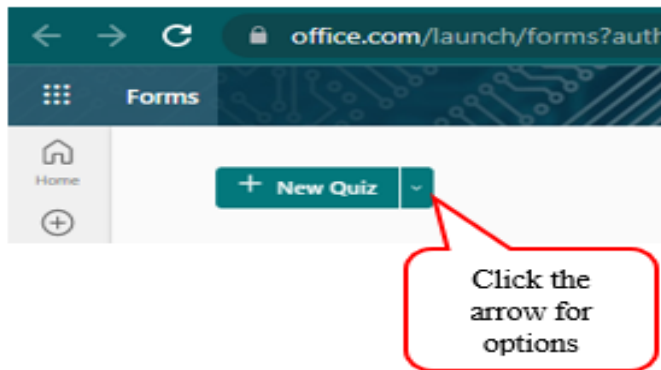


With Microsoft Forms, you can create surveys, quizzes, and polls, invite others to respond to it using almost any web browser or mobile device, see real-time results as they're submitted, use built-in analytics to evaluate responses, and export results to Excel for additional analysis or grading

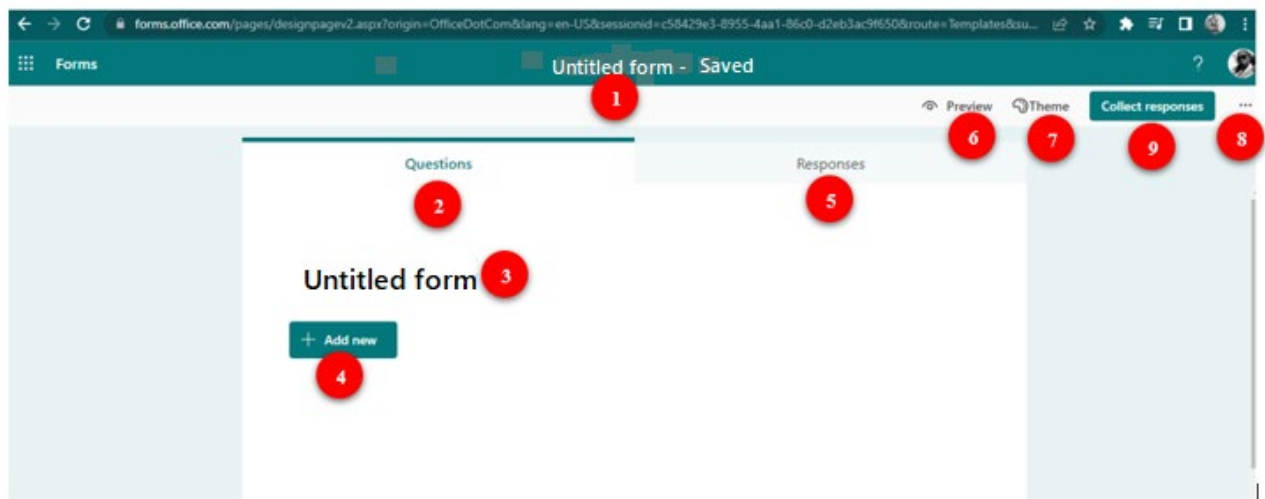


Educators create forms for either grading their students (quizzes) or only gathering information. These two feature are found as New Quiz or New Form





The opened Form comes with the following features



1. Title of the form
2. Questions area
3. Edit form title
4. Add new question button
5. Responses area
6. Form preview (Computer / Mobile)
7. Set the them (Background of the form)
8. Form general setting
9. Share to respondents

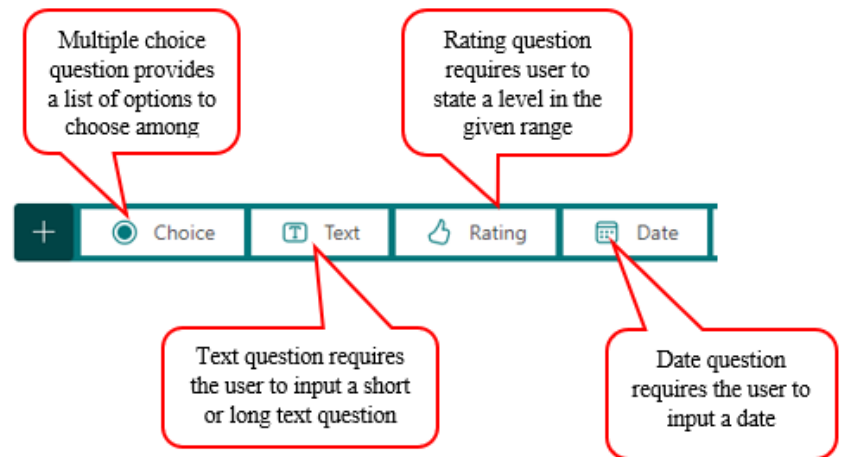
The Add New button allows to set a new question in difference categories:

Multiple choice question

Text question

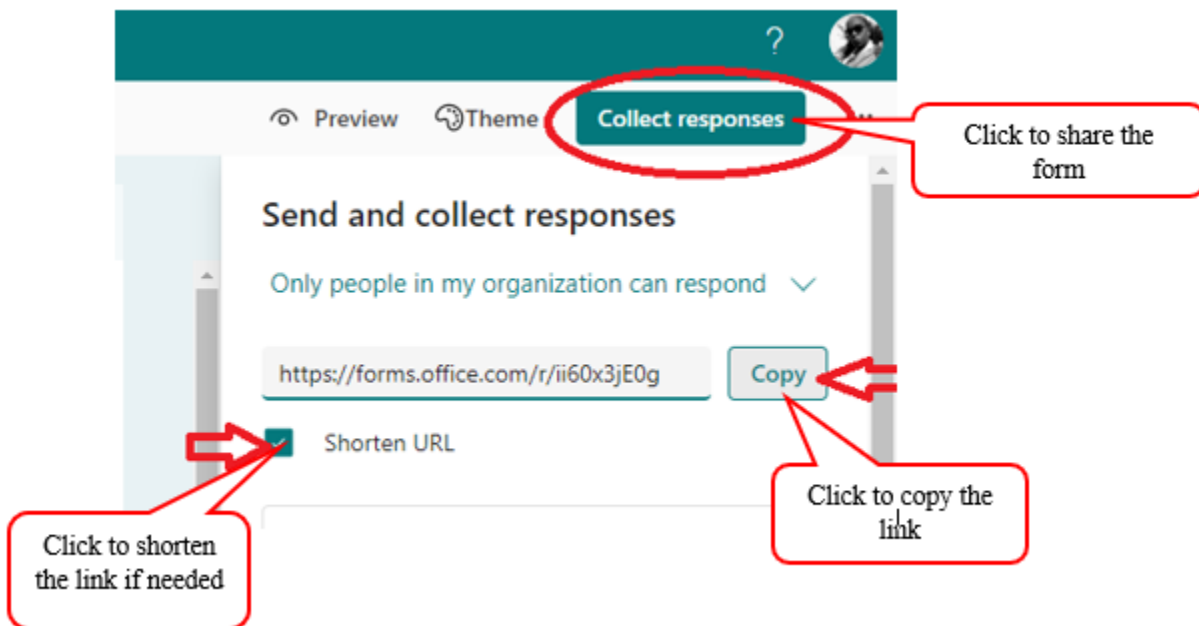
Rating question

Date question

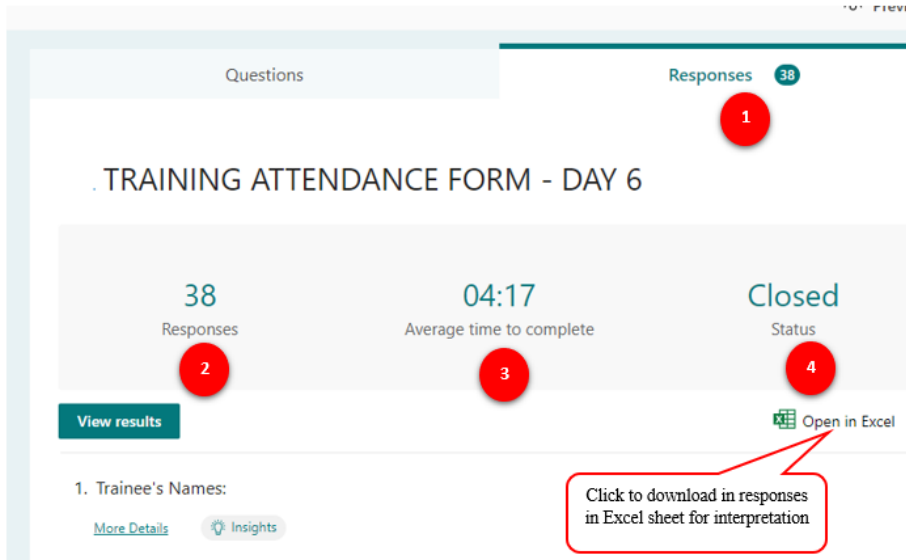


After all questions are set, the form creator may preview the form to see how it looks. He / She may also change the font of the form according to his / her wish. In addition to this, it is better to set the form general settings such as Who can fill the form, Options for responses, and Response receipts.

As the form is created for receiving responses, it has to be shared to respondents to collect responses or to collaborators as well, through the Share button. The link is copied to be shared to respondents.



Once the link is shared and respondents have provided their answers, the response menu shows the number of submitted responses. The form owner can view and download responses in MS Excel



1. Responses Menu
2. Number of responses
3. Form Average time to complete
4. Form status (Active / Closed)

Practical Exercise: <https://docs.microsoft.com/en-us/training/modules/create-authentic-assessments-microsoft-forms/knowledge-check>

c. Microsoft Teams



Microsoft Teams is a collaboration application built for hybrid work. You and your team stay informed, organized, and connected all in one place. Explore how Teams can help you and your colleagues come together no matter where you are: Chat / Message someone or a group to talk about work, projects, or just for fun. Microsoft Teams is a workspace for real-time collaboration and communication, meetings, file and app sharing, and all accessible to everyone.

Teachers can easily communicate with students, host virtual learning webinars, host Team Meetings with unlimited pupils and store easily accessible files. Teachers can also collaborate and work alongside pupils on documents.

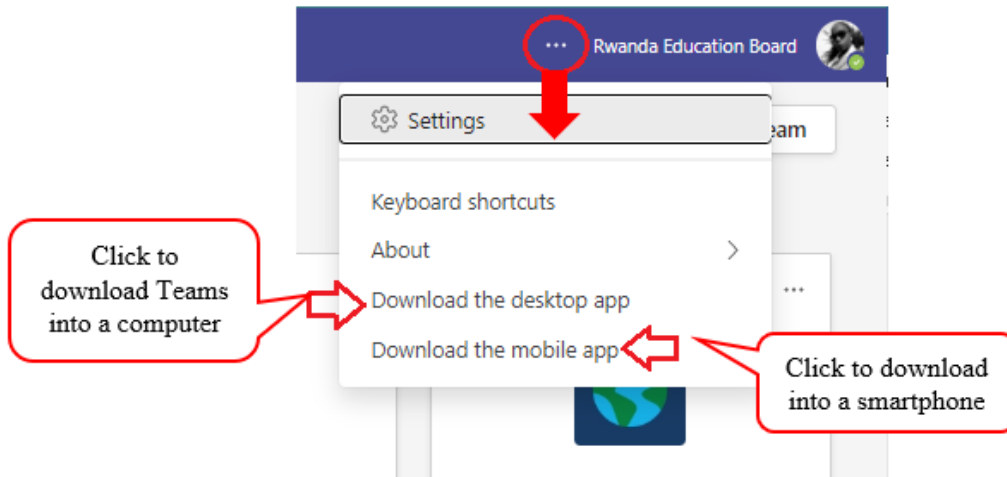
How to open MS Teams?

Log into Office 365 and click all apps button then choose Teams

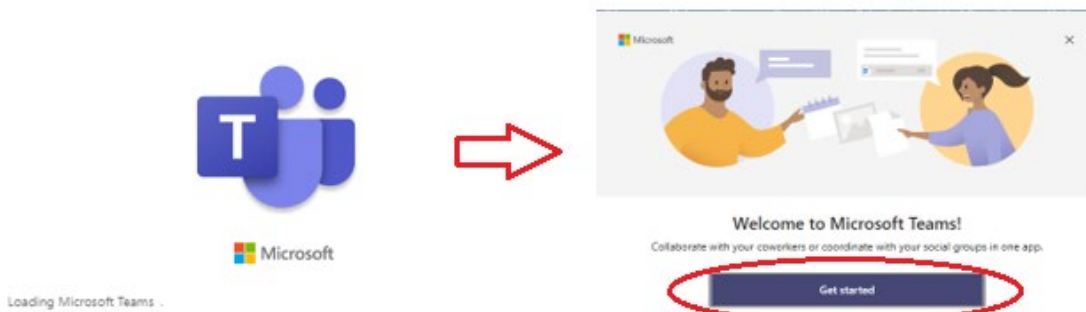


How to download and log into Teams

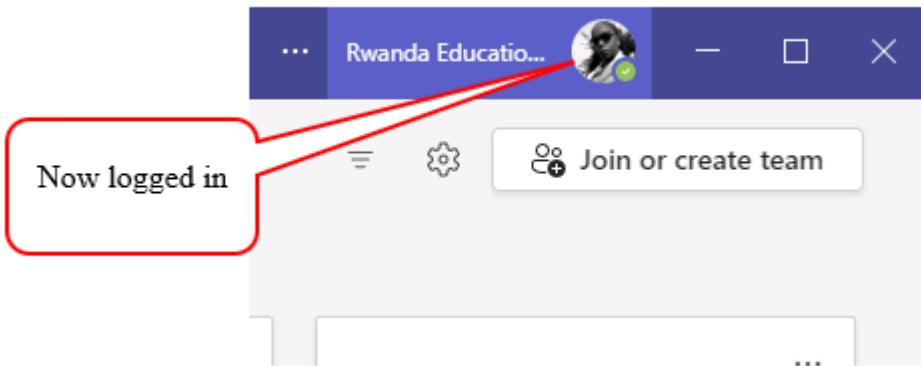
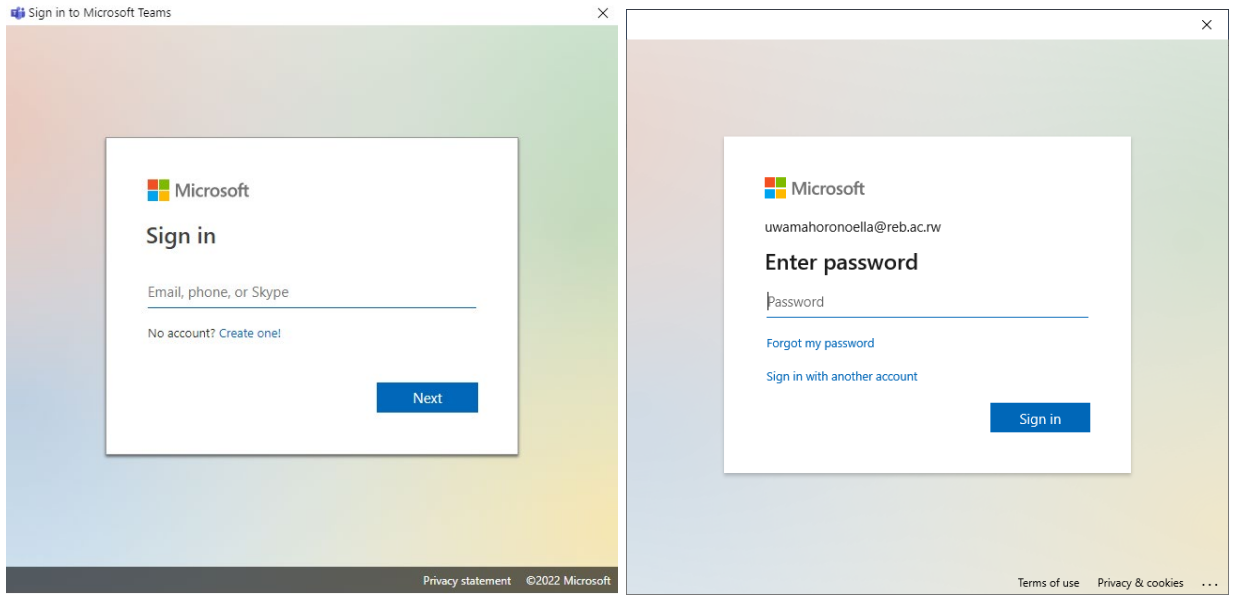
1. Sign in to Microsoft 365.
2. Select the menu button, and then select Teams.
3. After Teams loads, select the settings menu in the upper-right corner, then select Download the desktop app.
4. Save and run the downloaded file.



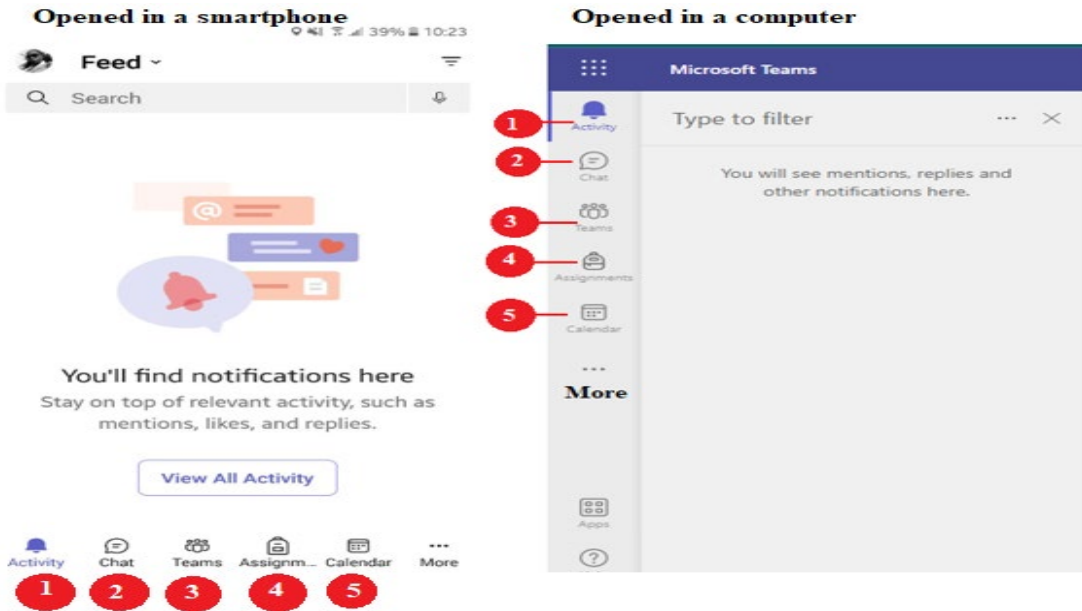
The app is being downloaded. Click on it to open



Sign in with your Microsoft 365 email address and password.



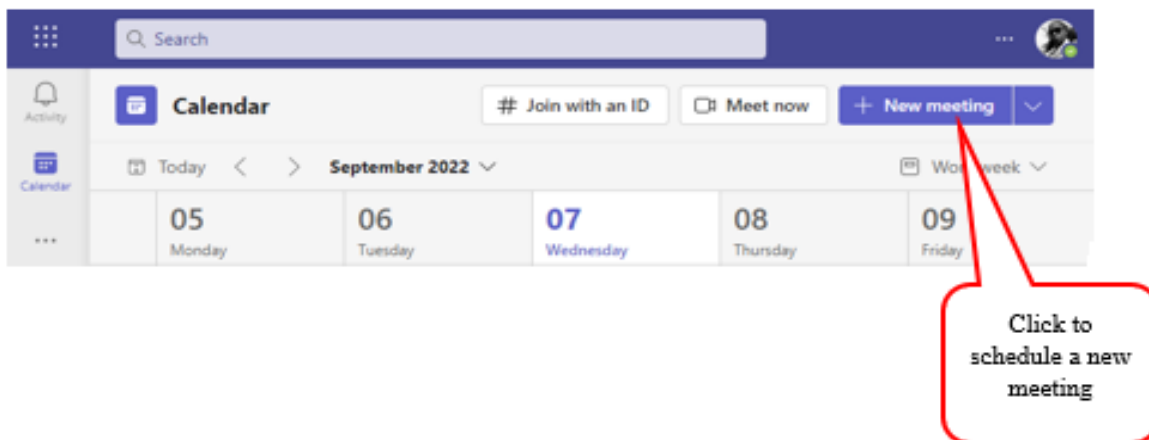
MS Teams Menus

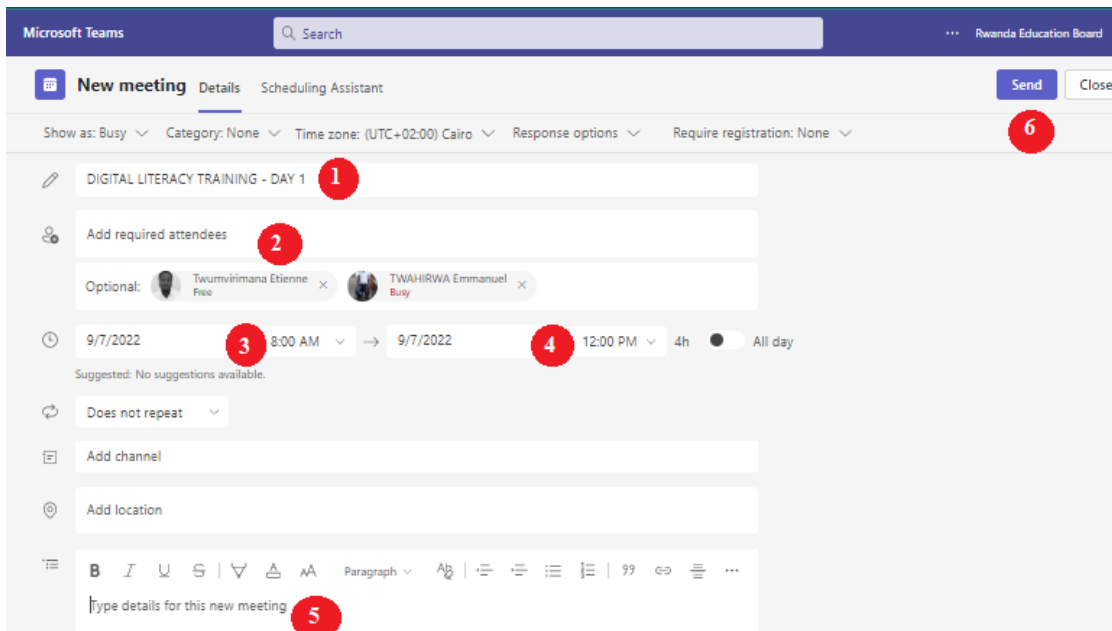


1. **Notification Tab:** Shows all activities such as call, mentions, replies, etc
2. **Chart Tab:** Allows to send and read the received messages.
3. **Teams Tab:** Shows teams to which the user belongs and provides a way to join or create a team.
4. **Assignment tab:** Allows to create assignments
5. **Calendar Tab:** Allows to schedule new meeting

How to schedule a meeting?

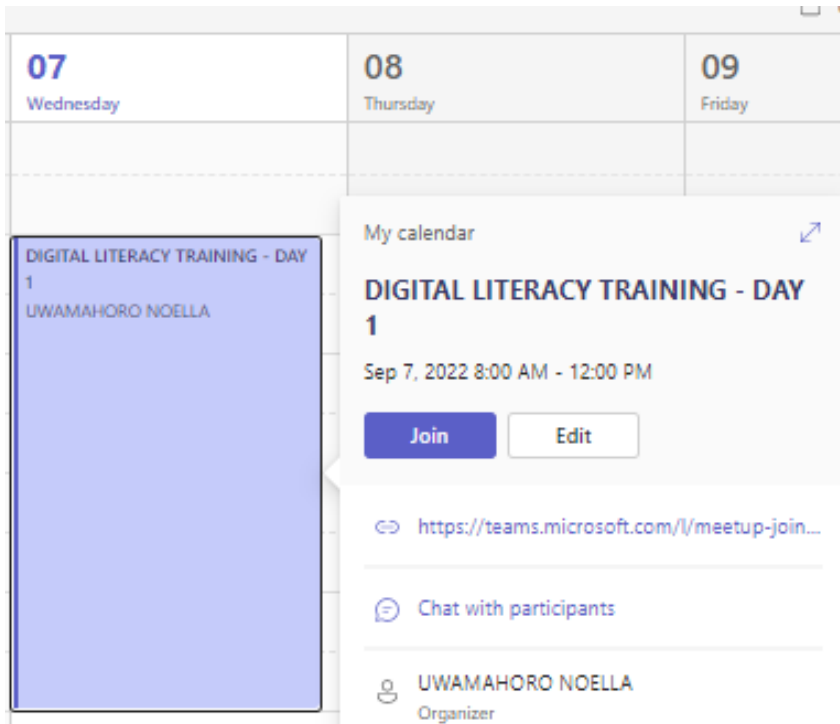
MS Teams as a conference tool, allow to schedule a new meeting and invite participants. This is option is provided under Calendar Tab and follow steps:





1. Set the meeting
2. Set the required participants (At least one of attendees)
3. Set the starting date and time
4. Set the ending date and time
5. Add the meeting description if any

Click send button



The new meeting is marked on the Teams calendar where the owner may click to copy the meeting link and share it to non-invited participants.

Teams best practices

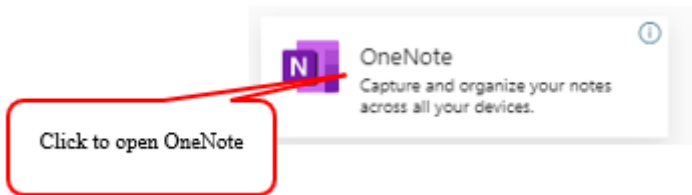
1. See meeting attendees	4. Create breakout rooms	7. Share screen or content
2. Meeting chatting room	5. Activate / Deactivate camera	8. Leave the meeting if it ends
3. Raise your hand or other reactions	6. Mute / Unmute Microphone	

Practical Exercise: <https://docs.microsoft.com/en-us/training/modules/m365-teams-collab-manage-teams/summary-knowledge-check>

d. Microsoft OneNote



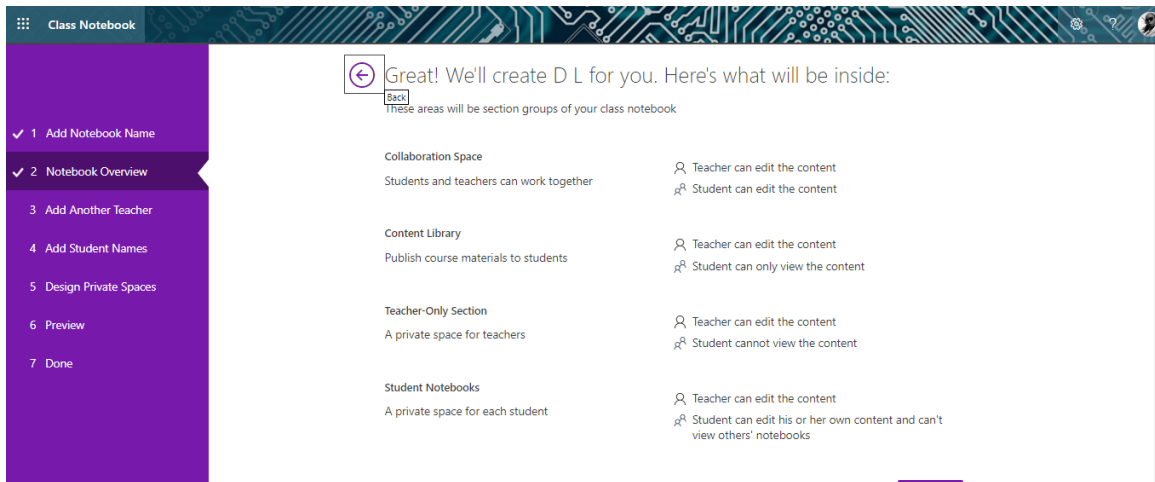
OneNote is a digital notebook that automatically saves and syncs your notes as you work. Type information in your notebook or insert it from other apps and web pages. With OneNote we can organize documents into sections and pages, with easy navigation and search. A OneNote document is organized into Sections and a section is made of several pages according to the wish of the user.



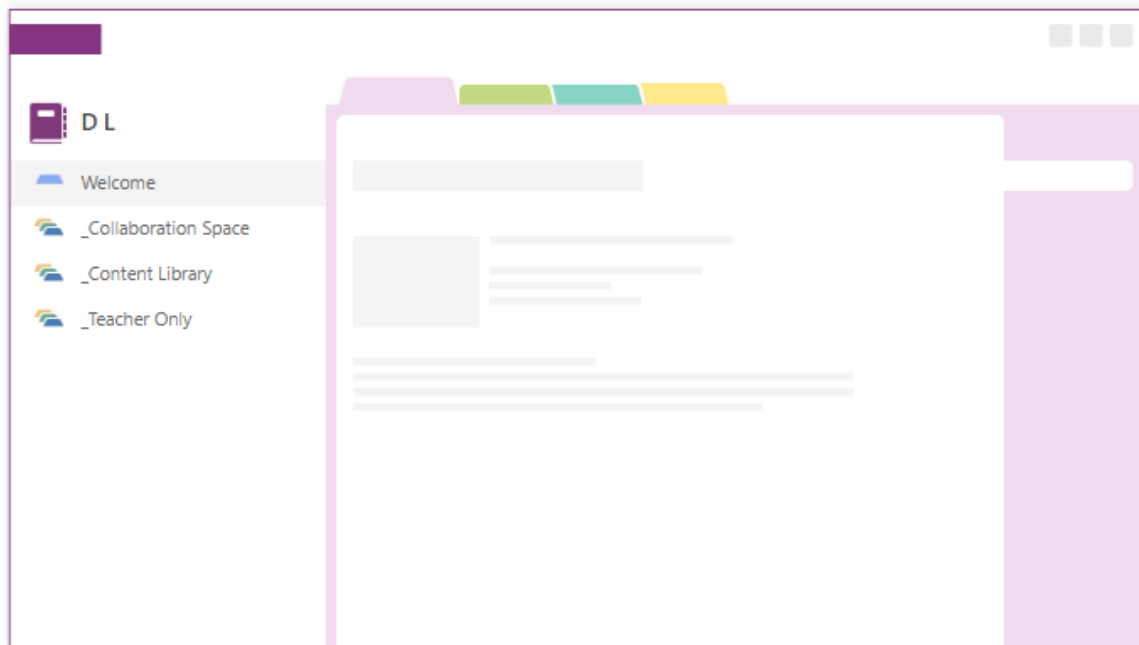
OneNote features

The screenshot shows the OneNote application interface. The ribbon at the top includes File, Home, Insert, Draw, View, and Help. The main area displays a notebook titled 'UWAMAHORO' with a section named 'Math Unit 1'. The left sidebar shows a list of sections: NOTES, EXERCISES, and EXAMS. The main content area shows a page titled 'Math Unit 1' with a date and time, a welcome message, and a table. The interface is annotated with red circles and numbers 1 through 8, corresponding to the list of features on the right.

1. Document title
2. Add section button
3. Add page button
4. Text area
5. OneNote tabs and toolbox bar (Ribbon)



Teacher's notebook Student's notebook



Practical Exercise:

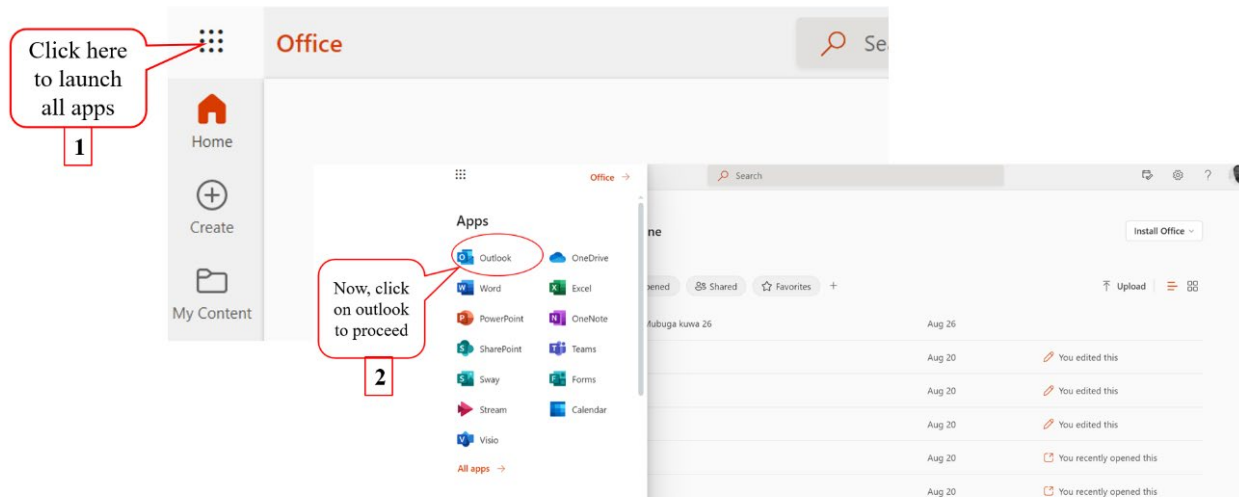
<https://docs.microsoft.com/en-us/training/modules/get-started-with-onenote/knowledge-check>

e. **Microsoft Outlook** 

Outlook organizes your emails, calendars, contacts, tasks, and to-do lists, all in one place. That organization starts with your email account. From there you can start working with emails, turning them into tasks or appointments, and storing information about the people you interact with in your contacts so that you never

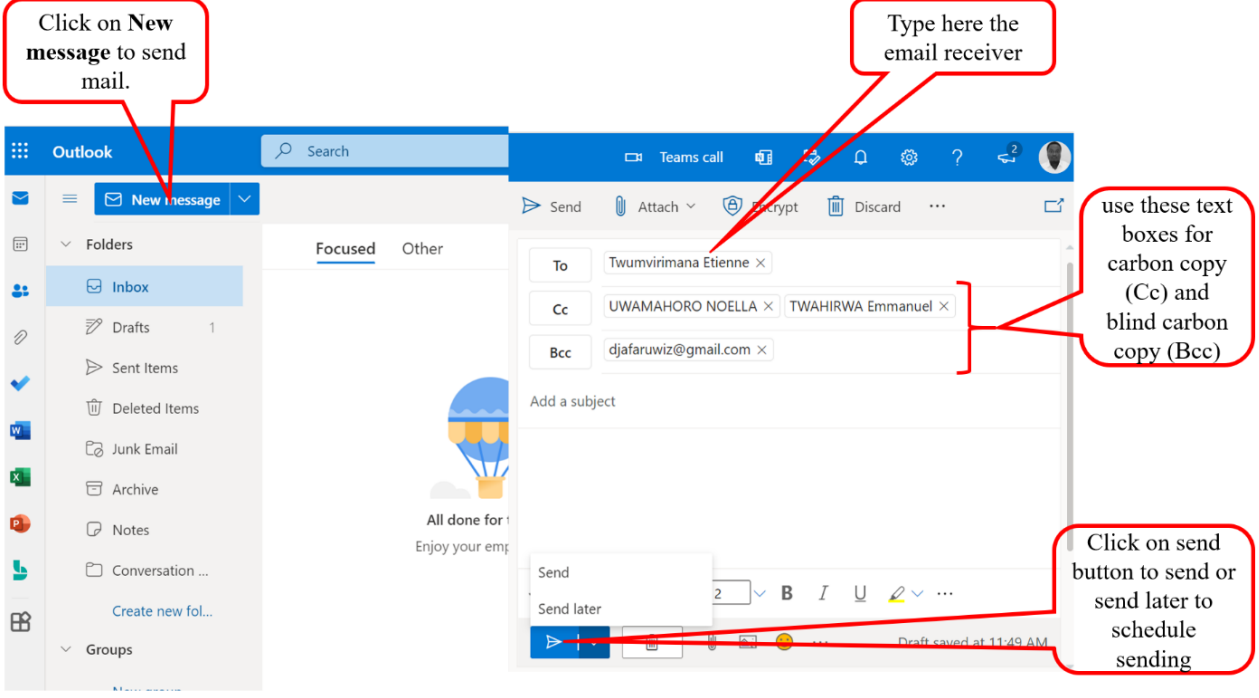
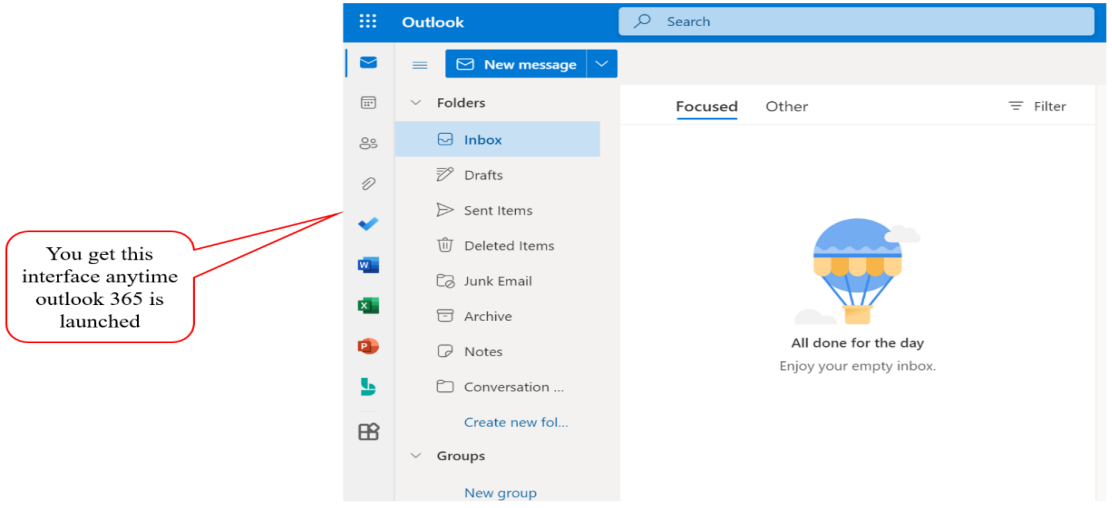
have to remember an email address or a phone number. Let's take a quick walk-through of some basic tasks

To start outlook

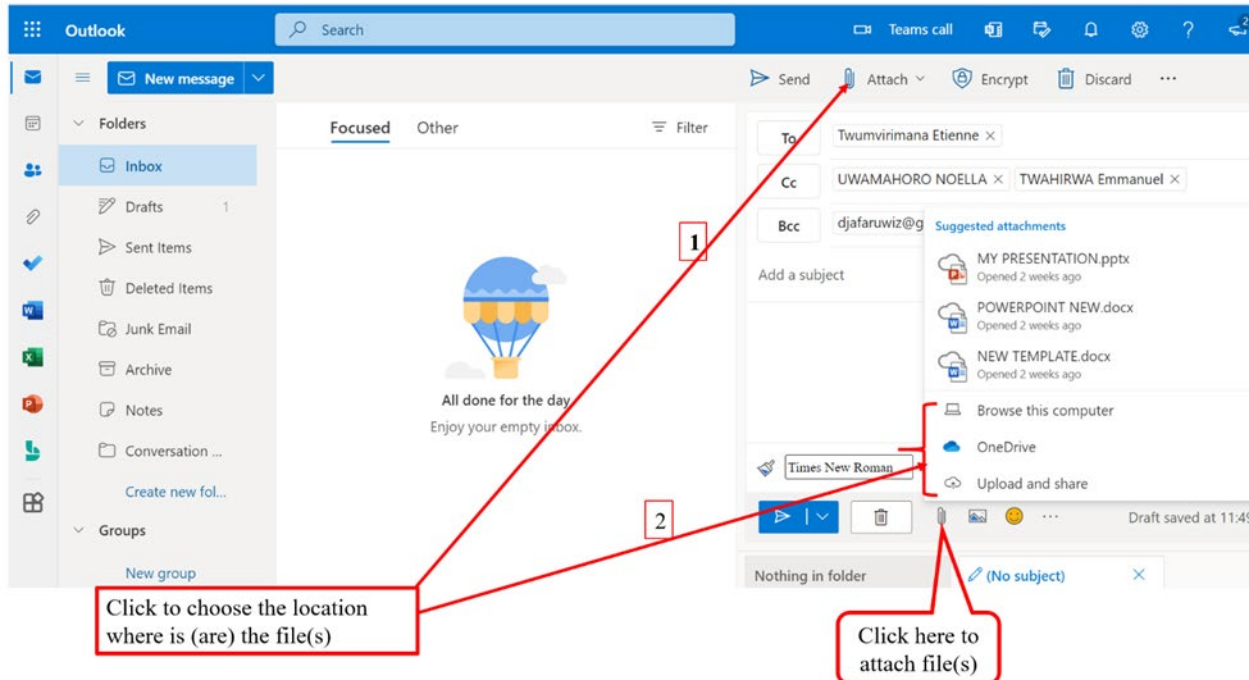


Create and send email

1. Choose New Email to start a new message.
2. Enter a name or email address in the To, Cc, or Bcc field.
3. If you don't see Bcc, see Show, hide, and view the Bcc box.
4. In Subject, type the subject of the email message.
5. Place the cursor in the body of the email message, and then start typing.
6. After typing your message, choose Send.



To attach files



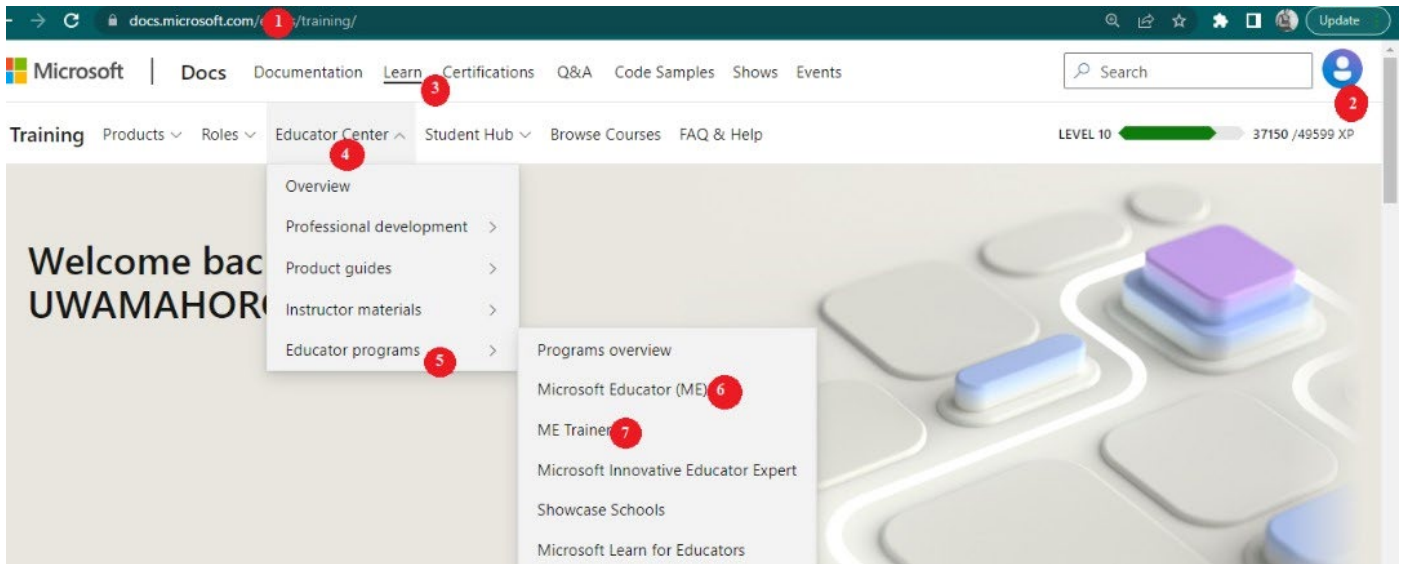
Practical Exercise: <https://docs.microsoft.com/en-us/training/modules/understand-actionable-messages/6-knowledge-check>

8.3. Microsoft learn

Microsoft Learn is a free, online training platform that provides interactive learning for Microsoft products with the goal of helping educators become proficient on technologies and learn more skills with fun, guided, hands-on, interactive content that's specific to their role and objectives. To discover Learn training paths type docs.mocrosoft.com into the browser address bar and explore the features.

Steps to reach the site

1. Open the browser of your computer / smartphone
2. Into the address bar type **docs.microsoft.com** and press enter
3. In the up-right corner Click **Sign in**
4. Click **Learn** from the Menu bar
5. Click **Educator Center** arrow and Choose **Educator Programs**
6. Click **Microsoft Educator (ME)** after completion, then
7. Click **Microsoft Educator (ME) Trainer**



The impact of teacher quality outweighs the impact of any other school education program or policy. In fact, teacher effectiveness is the largest factor influencing student outcomes, outside of family background.

The professional growth pathway is designed to help teachers and school leaders everywhere become proficient in Microsoft technologies and learn more innovative classroom skills with fun, guided, hands-on content that's specific to their role and goals.



Microsoft Educator academy

1 hr 39 min remaining • Learning Path • 4 of 6 modules completed

Beginner K-12 Educator School Leader Flip Microsoft Teams OneNote



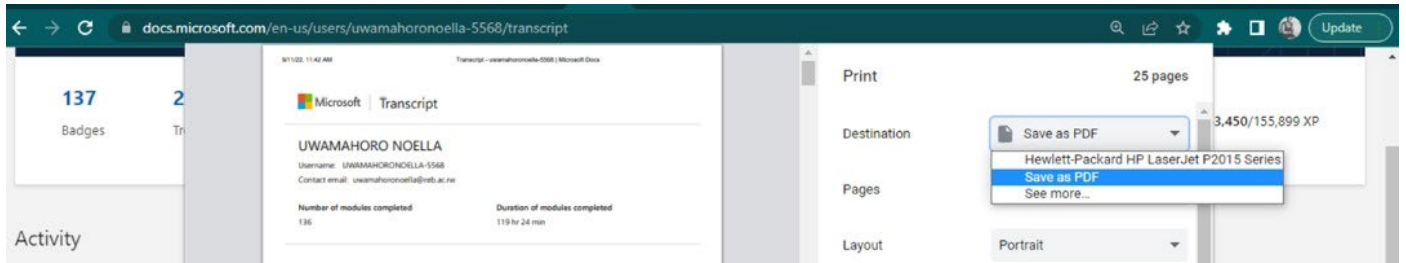
Microsoft Educator Trainer academy

7 hr 53 min • Learning Path • 8 Modules

Intermediate K-12 Educator School Leader Flip Microsoft Teams OneNote

- Click Start Learning path for both ME and ME Trainer

- Read through the content and find answer to the knowledge check at the end of each course
- To see your transcript, Click Profile and choose Achievements



8.4. Practice

ACTIVITY 8

Open the browser in your computer or smartphone or Tablet

Navigate through Microsoft Learn and read the Microsoft Educator Academy Learning path

Download your transcript and upload it to your MS OneDrive, to prepare a link to shared

MODULE 9: INTRODUCTION TO XO LAPTOP

XO Laptop is a low cost laptop distributed to children in developing countries around the world, to provide them with access to knowledge, and opportunities to "explore, experiment and express themselves"

The laptop is manufactured by Quanta Computer and developed by One Laptop per Child (OLPC), a non-profit organization.

The XO Laptops use flash memory instead of a hard disk drive (HDD), and come with a pre-installed operating system derived from Fedora Linux, with the Sugar graphical user interface (GUI), and GNOME Interface (GNU Network Object Model Environment) It also use Mobile ad hoc networking via 802.11s Wi-Fi mesh networking, to allow many machines to share Internet access as long as at least one of them could connect to an access point.

XO Laptop has 4 different versions.

These versions are: XO 1.0, XO 1.5, XO 1.75, and XO 4.0

XO LAPTOP



9.1. XO laptop physical parts

- Screen
- Keyboard
- Mouse

The display functions in a full-color mode similar to other laptop displays and in an ultra-low-power, ultra-high-resolution, black-and-white mode that is readable in direct sunlight.



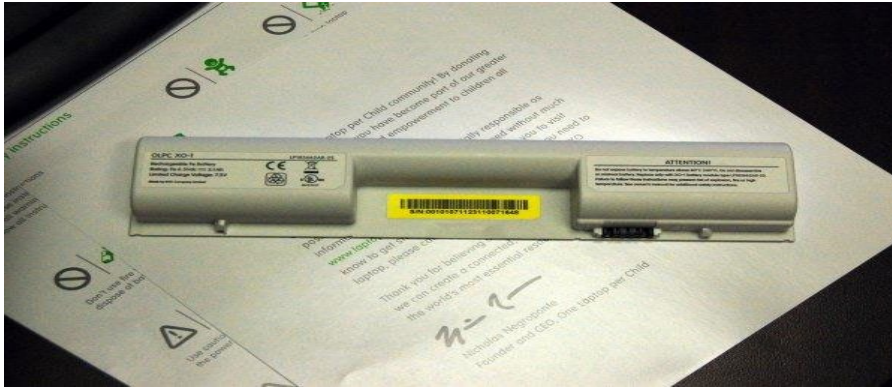
PORTS

Along with offering unique connectivity options, the XO laptop can work with a wide range of external devices.

USB/memory ports

The XO laptop features three external USB ports to support a variety of plug-in peripherals (one seen in the photo above, and two others under the other "ear").

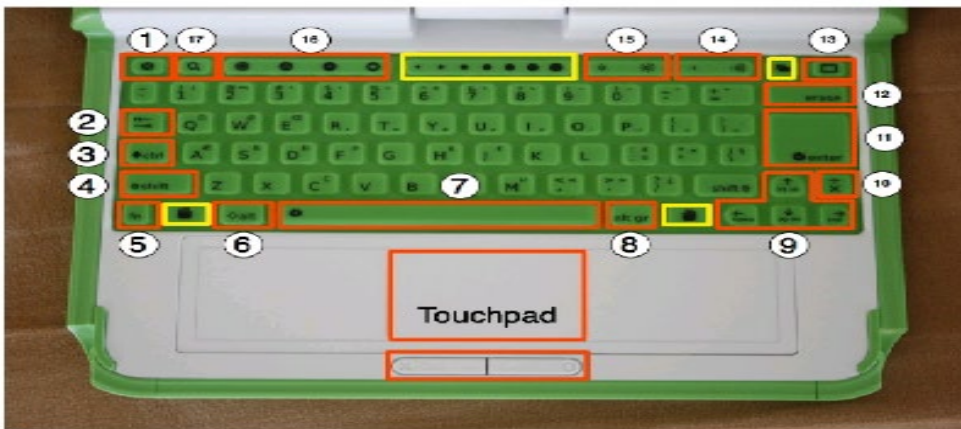




This is the XO battery. The battery attaches to the back of your XO.

Keyboard and touchpad

The Keyboard and Touchpad



1. Escape-key

The escape key is labeled with an \times symbol on a black circle. The escape key is most commonly used in combination with the control key to quit activities (**ctrl + esc**).

2. Tab-key

The tab key is labeled with arrows pointing right and left and creates an indentation in a paragraph. Also, use it in combination with the control, shift and alt keys to display open Activities. For example, **alt + tab** displays running Activities one after the other.

3. Control-key

The control key is used in combination with other keys to issue commands. For example, **ctrl + c** copies to the clipboard; **ctrl + v** pastes from the clipboard.

4. Shift key

The shift key is used in combination with other keys as a modifier, most commonly to shift between lowercase and uppercase in Latin-based alphabets.

5. Fn-key

The function key is used in combination with other keys as a modifier. For example, **fn + erase** is delete; **fn + up arrow** is page up.

- a) **Alt key** :The alt key is used in combination with other keys to issue commands. For example, alt + enter toggles full-screen mode; alt + spacebar toggles the tray visibility. This example works in the Browse Activity but not in the Record Activity.
- b) **Spacebar**: The spacebar key types a space. In the future, when used in conjunction with the function key (fn), it will display the source code for the currently running Activity.
- c) **Alt Gr key**: The alt graphics key is used in combination with other keys as a modifier, most commonly to select an alternative letter or generate an accented character. For example, on the US keyboard, alt gr + j creates a euro sign €; a + alt gr + 4 creates á.
- d) **Arrow keys**: The arrow keys are used for navigation; combined with the function key (fn), they are used for page up, page down, home, and end.
- e) **Language key**: The language key is found on keyboard layouts that combine Latin and non-Latin scripts, going between scripts so that you can switch between typing in English and Hindi by pressing it. On Latin-only keyboards, the language key has been replaced by a × and ÷ key.
- f) **Enter key**: The enter key—in addition to its standard use—is used in combination with modifier keys. For example, alt + enter toggles full-screen mode.
- g) **Erase key**: The erase key deletes the character behind the cursor (backspace). fn + erase deletes the key in front of (or on) the cursor.
- h) **Frame key**: The Frame key toggles the presence of the Frame on the screen. The Frame is the black border around the screen that holds the Activity taskbar, clipboard, wireless connections, battery level, and so on.
- i) **Volume controls**: The volume keys lower and raise the audio level.

- j) Brightness controls: The brightness keys lower and raise the brightness of the screen backlight. To turn the backlight off completely may take 7 to 8 button presses.
- k) View keys: The four view keys, from left to right, take you to the Neighborhood view, the Group view, the Home view, and the Activity view.
- l) Search key: The search key takes you directly to the Journal and places the text cursor in the search box.

9.2. Software parts

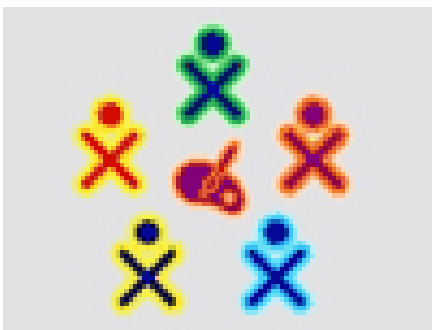
Software is a set of instructions, data or programs used to operate computers and execute specific tasks. It is the opposite of hardware, which describes the physical aspects of a computer. Software is a generic term used to refer to applications, scripts and programs that run on a device. XO laptop has 2 interfaces: Sugar interface and Gnome interface

9.2.1. Sugar interface

Sugar is a learning platform that reinvents how computers are used for education. Collaboration, reflection, and discovery are integrated directly into the user interface.

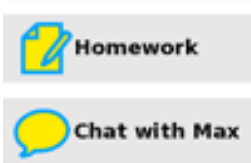
Sugar applications are called "**Activities**". Activities include an application as well as sharing and collaboration capabilities, a built-in interface to the Journal, and other features such as the clipboard.

Sugar promotes “studio thinking” and “reflective practice”.



Sugar facilitates sharing and collaboration.

Children can write documents, share books and pictures, or make music together with ease.



Everything is saved automatically.

It is our goal that you will never lose your work. Documents will eventually sync with a network server, adding additional protection.

a) Typing turtle Activity

In typing turtle, you learn to use keyboard in different levels:

Kids learn typing method in fun way what I can call typing adventure.



- 1) Space key and enter key
- 2) Home row keys: a, s, d, f, g, h, j, k and l
 - Typing each letter
 - Exercise of typing pairs of letters
 - Exercise of combining two different letters
 - Exercise of writing words
- 3) Home row balloons: is the practice of the home row keys in exciting game.

- 4) The top row key: q, w, e, r, t, y, u, i, o and p
 - Typing each letter
 - Exercise of typing pairs of letters
 - Exercise of combining two different letters
 - Exercise of writing words
- 5) Top row balloons: is to practice the home and row key together by trying to pop all the balloons.
- 6) The bottom row keys: z, x, c, v, b, n and m
 - Typing each letter
 - Exercise of typing pairs of letters
 - Exercise of combining two different letters
 - Exercise of writing words
- 7) Alphabet balloons: the practice/or exercise of all alphabets/letters. This practice combines home row, top row and bottom row keys.
- 8) Left hand capitals: after knowing all placement of the alphabet, it is time to get started with capital letters. This level 8 teaches you the capital letters which are typed by your left hand: Q, W, E, R, T, A, S, D, F, G, Z, X, C, V and B
 - Typing each letter
 - Exercise of typing pairs of letter
 - Exercise of combining two letters writing in capital and single
 - Exercise of writing words using all letters writing in capital and single
- 9) Right hand capitals: after knowing all the placement of the alphabet, it is time to get started with capital letters. This level 8 teaches you the capital letters which are typed by your right hand: Q, W, E, R, T, A, S, D, F, G, Z, X, C, V and B
 - Typing each letter
 - Exercise of typing pairs of letters
 - Exercise of combining two letters writing in capital and single
 - Exercise of writing words using all letters writing in capital and single

10) Capital balloons: practice of capital letters by popping some balloons

The image displays two sequential screenshots of a typing tutorial application. The top screenshot is titled "Welcome" and contains the following text: "Hihwahyah! Ready to learn the secret of fast typing? The secret is: Always use the correct finger to press each key! To begin learning, place your hands on the keyboard just like the picture below. Press the space key with your right thumb." Below the text is a green rectangular bar. The bottom screenshot is titled "The Home Row" and shows an accuracy of 100%. It contains the text: "Let's learn the new keys. Press the a key with your left little finger." Below this text is a small green square labeled "a". Both screenshots feature a keyboard diagram with red lines indicating finger placement on the keys.

b) Journal

The Journal Activity is an automated diary of everything you do with Sugar. Sugar Activities use the Journal as a place to save your work. You can use the Journal as a place to revisit old work, to resume incomplete work, to organize your completed work, and to reflect upon your progress as a learner.

To show the Journal, click the Journal icon on the Frame.

- **To delete in Journal**

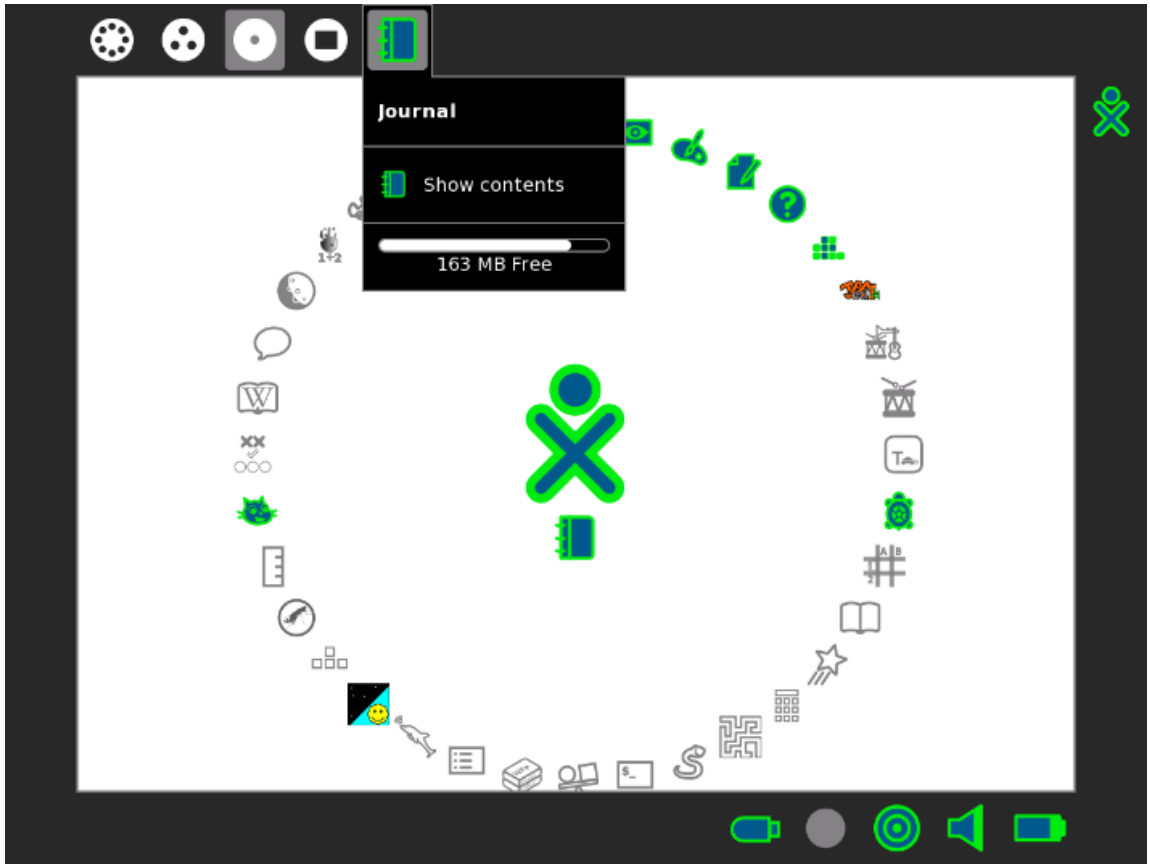
You can delete only some contents in Journal

- **Way to delete in Journal**

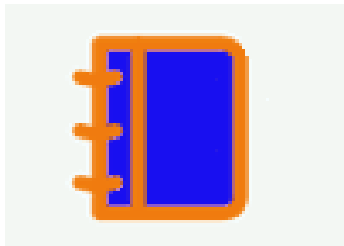
Open Journal activity, Place your cursor on the icon of the activity you want to delete then press right click and click on Erase.

- **A Journal is used for accessing data.**

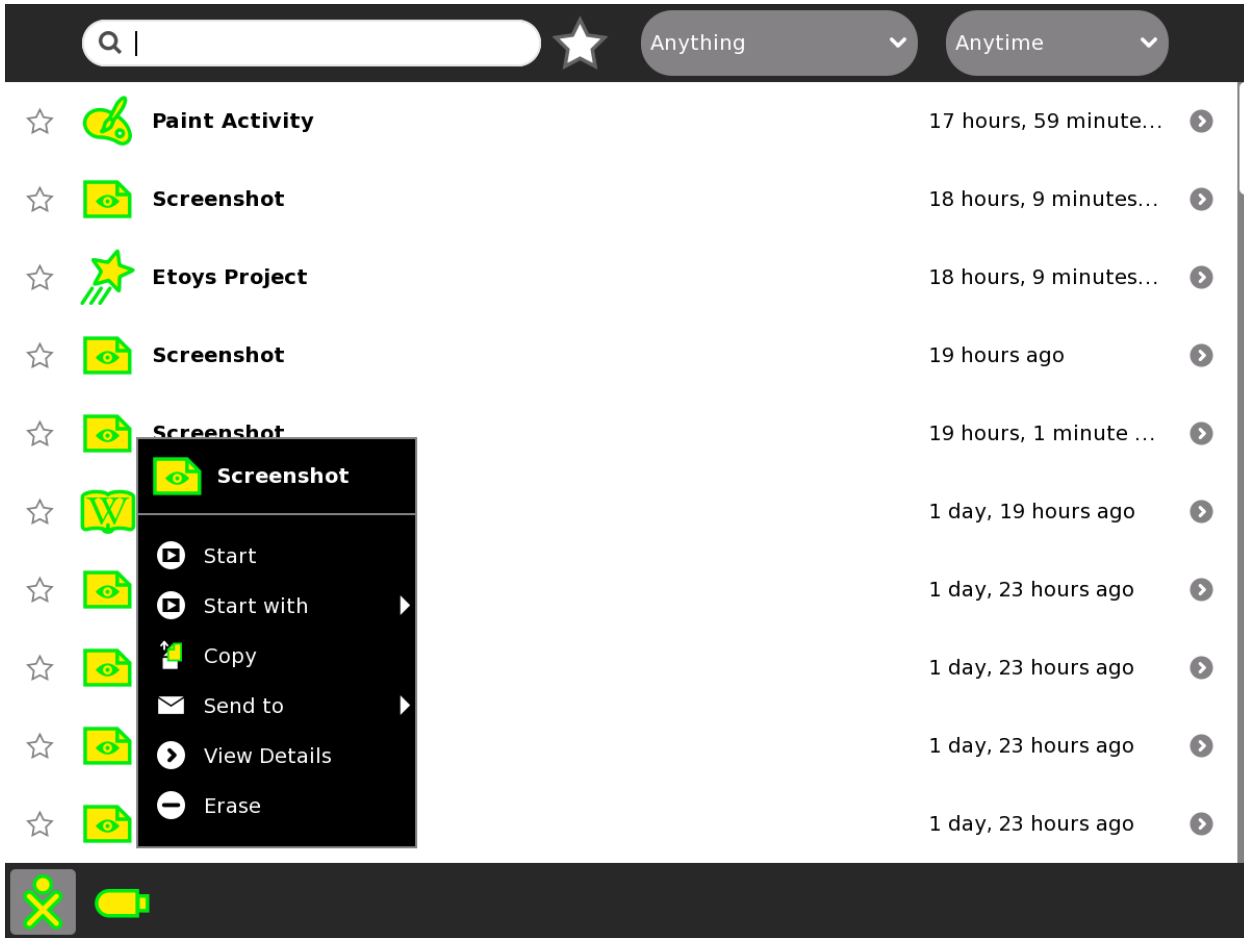
The Journal is a diary of things that you make and actions you take. It is a place to reflect upon your work.



Journal icon



Saving in internal and external



c) Write Activity

The write activity serves as the document creation. Its simple interface provides an easy starting point for children, presenting tools that make writing a story, poem, or essay simple and straightforward. It also supports tools for inserting images, creating tables, and performing layout operations.

To open it click on write icon:



- Learn how to use XO Keyboard to write activity

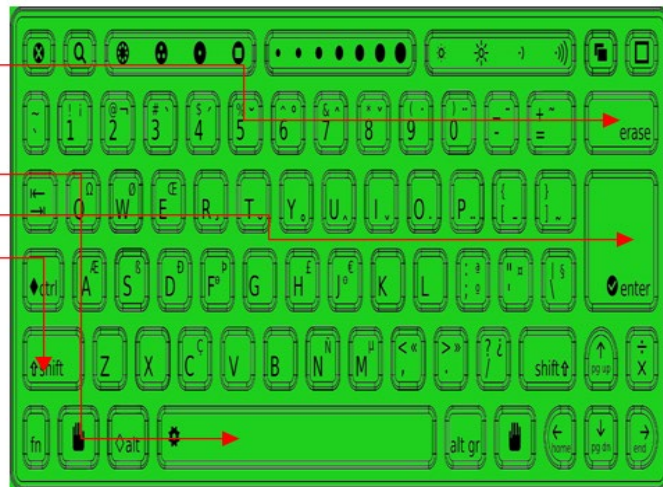
To write capital letter, making space and paragraph, deleting some special keys

Delete: press **Erase**

Capital letter: **Shift+Letter**

Space: press **Space Bar**

Paragraph: press **Enter**



- Text formatting: Underline, Bold, Italic

To make Underline, Bold and Italic

Choose the **TT**

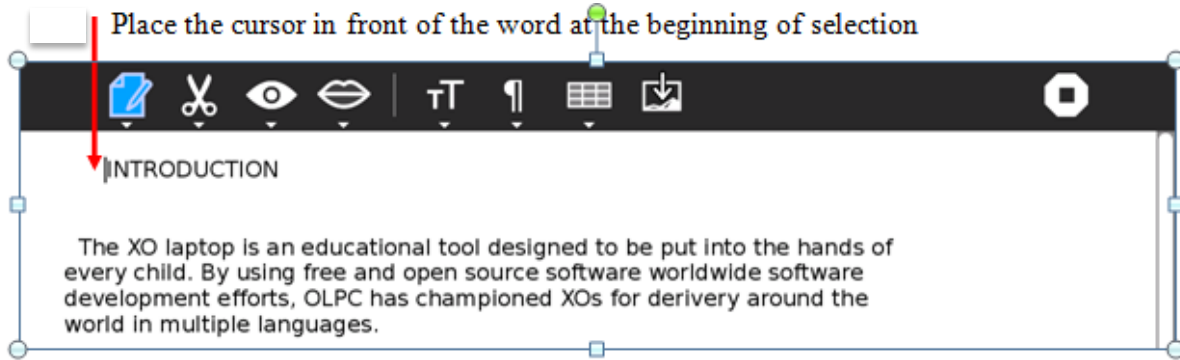


Underline

Bold

Italic

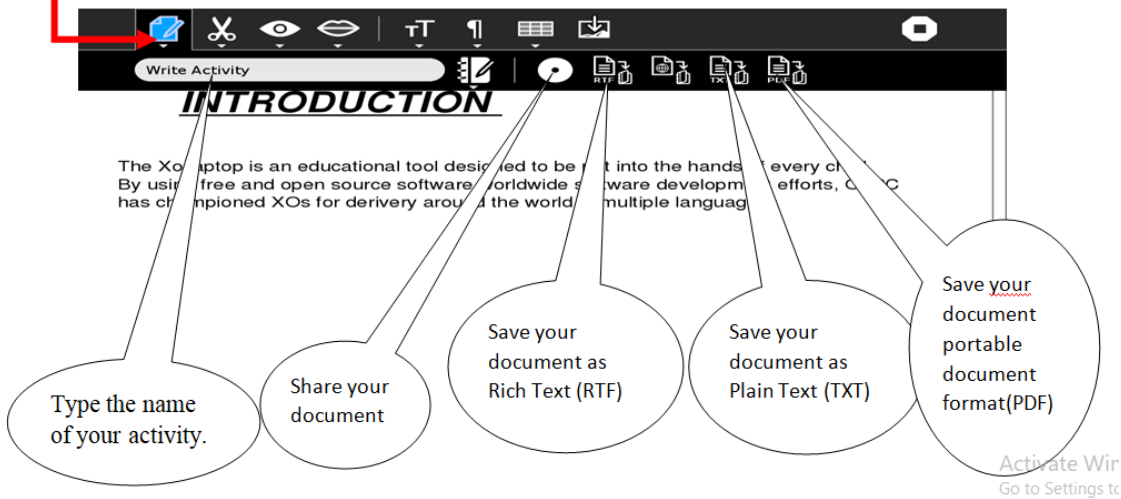
- To make any change, make a selection



- To Save and open a document

- Before saving you can rename your work by replacing Write Activity by the name

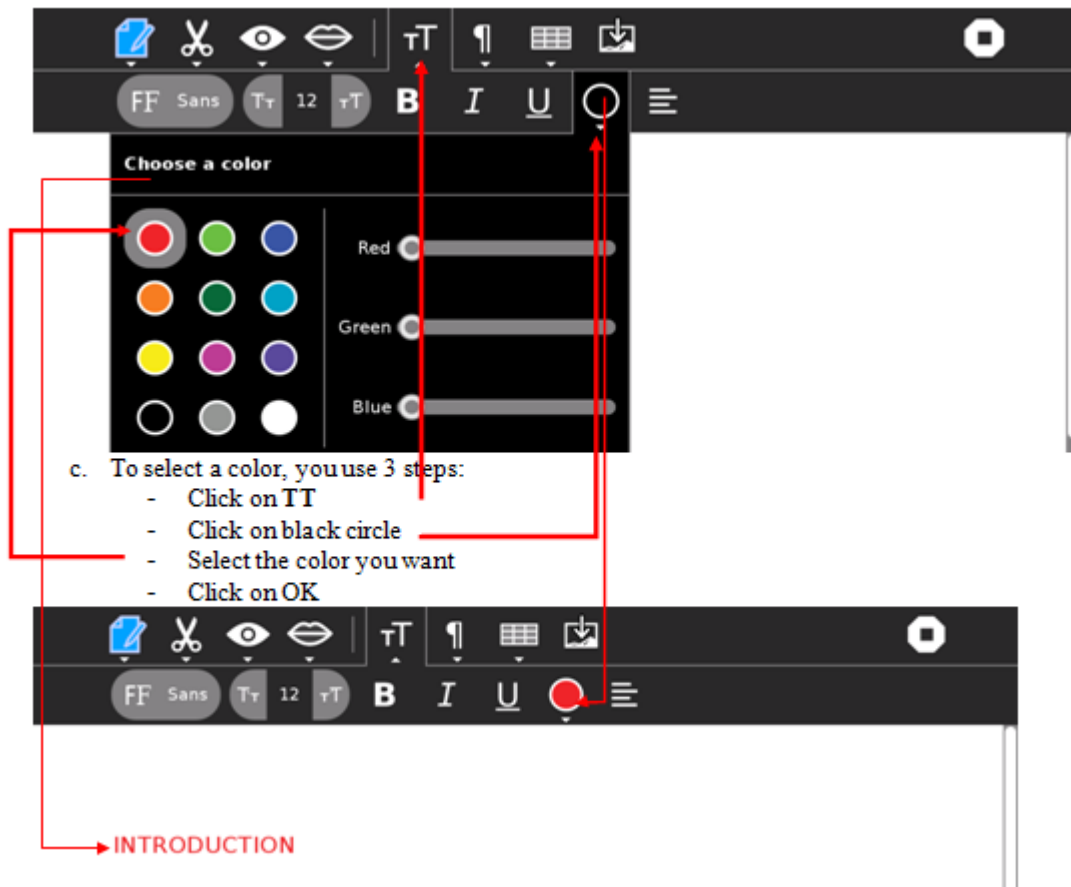
- Click on Activity and then click on Save button and then click on close button
- Before saving you can rename your work by replacing Write Activity by the name



- To change color and size:

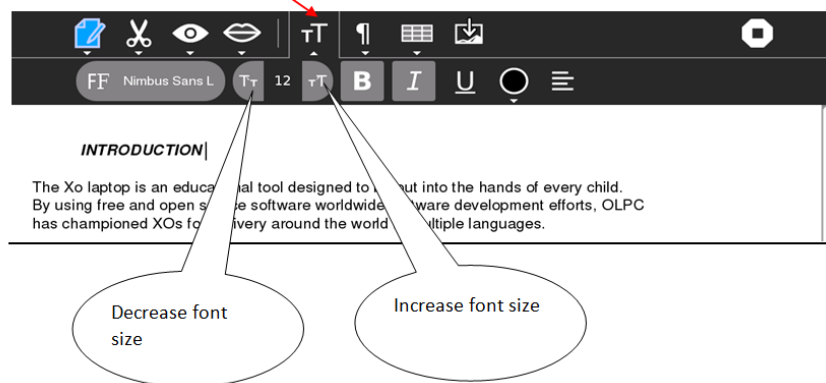
To change color:

- Select what you need to give a color
- Click on color button and it will show rectangular inside the window



• **To change size**

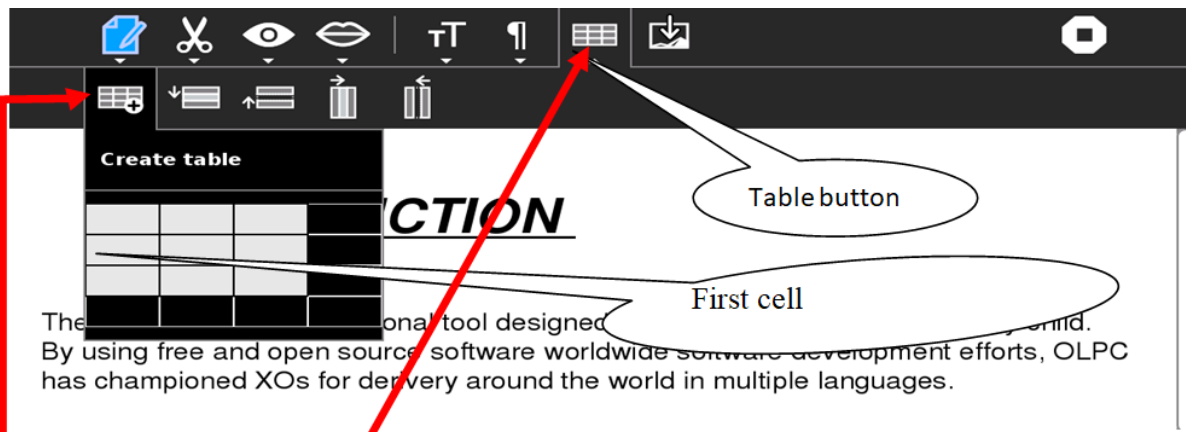
- Select TT
- Click on number 12 change it into desired character



- **To upload the picture in write:**

- Take the picture
- Copy it to clipboard: Place the cursor o the picture in tray region and then it will display a pop menu. Through that, click on **clipboard**
- Open write activity: in order to see its icon, back to home view
- Reduce the screen in order to see the picture copied: click on button up to Erase button
- Drag and drop the photo (shown at the left of your window) inside your paper of write
- Place the cursor where you want to start the comment and then start writing.

- **To insert a table**



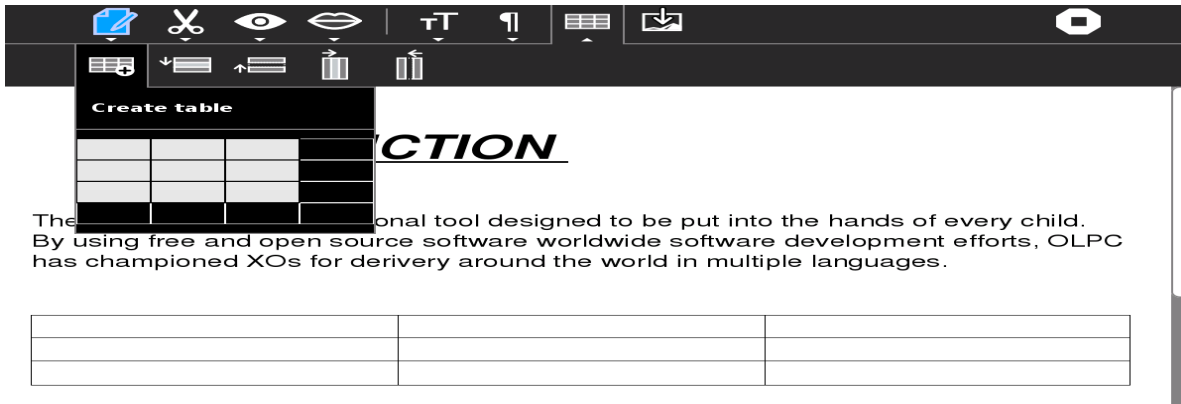
- Go to Table button
- Click to icon of “ Create table”

Activate W
Go to Settings

- **To upload a picture in write:**

- Take the picture
- Copy it to clipboard: Place the cursor o the picture in tray region and then it will display a pop menu. Through that, click on **clipboard**
- Open write activity: in order to see its icon, back to home view
- Reduce the screen in order to see the picture copied: click on button up to Erase button
- Drag and drop the photo (shown at the left of your window) inside your paper of write
- Place the cursor where you want to start the comment and then start writing.

- Put the cursor in the first cell, Drag the cursor until you get desired table, then click on enter



d) Paint Activity:

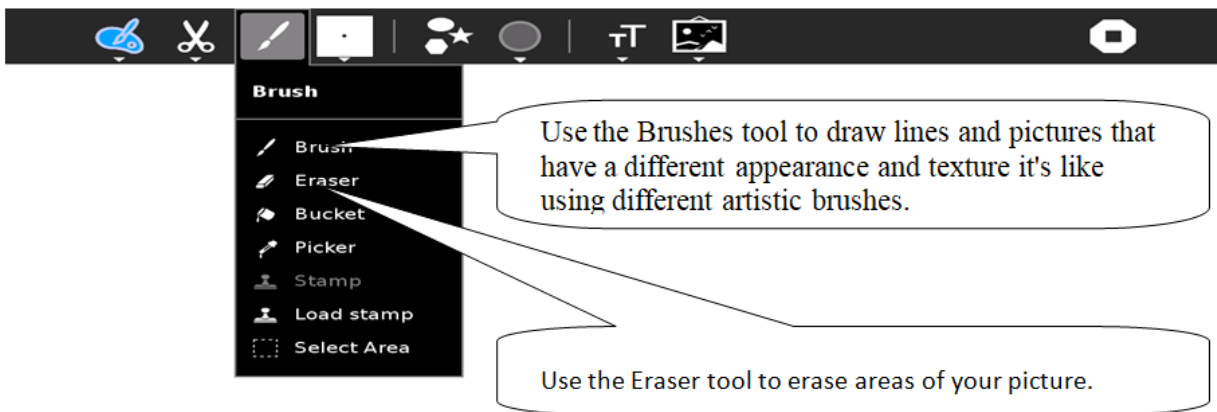
Paint activity provides a canvas for an individual or a group of children to express themselves creatively through drawing. In paint activity we either draw using free hands or geometrical shapes.

To open paint activity, we click on paint icon



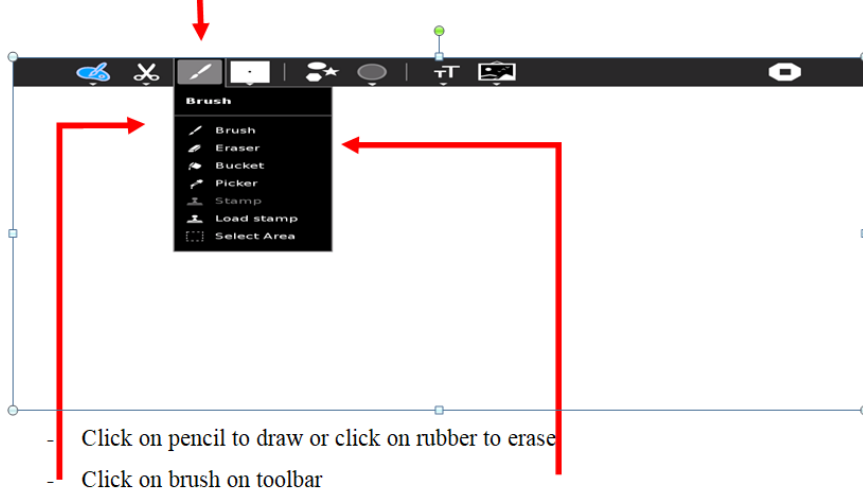
- **Drawing Tools**

The paintbrush, pencil, and eraser are the primary freeform drawing tools. The sizes and shapes of the brush and eraser may be adjusted via their secondary palette, which is shown by hovering your mouse on the tool icon.



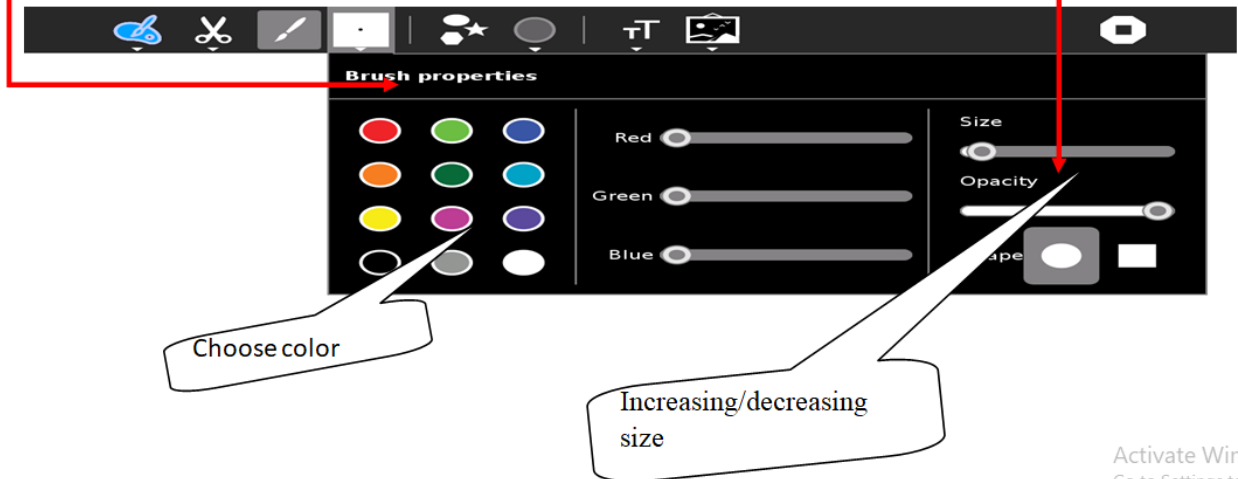
How to select pencil (brush), rubber and basket?

- Choose Pencil and Rubber (eraser)



- **Give a size to the pencil and color.**

- place the cursor to brush properties
- then you can change size by increasing/decreasing the number



Basket

A basket is used to color a large closed area.

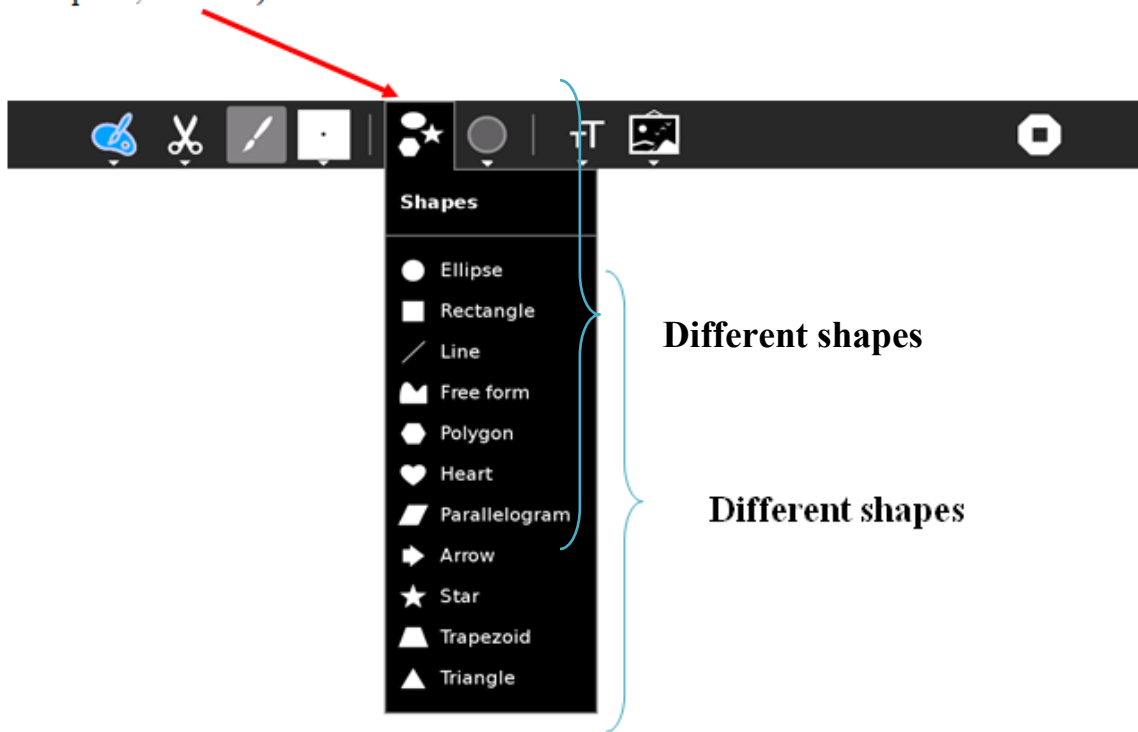
To select the color, use the same process as in write activity.

After selecting the color, choose the basket and place it on the suitable place then click.

- **Using geometrical shapes**

The Paint Activity has a toolbar dedicated to shape drawing. By clicking and dragging, you can create an instance of the currently selected shape and expand it to the size of your choosing. The interactive placement system makes the shape too even more powerful. Each shape has a secondary palette which allows various parameters to be set, such as the number of edges on a polygon, the number of points on a star, or the angles of a triangle.

- Click on shapes on toolbar and then it will show you different shapes to use (Line, square, circle...)



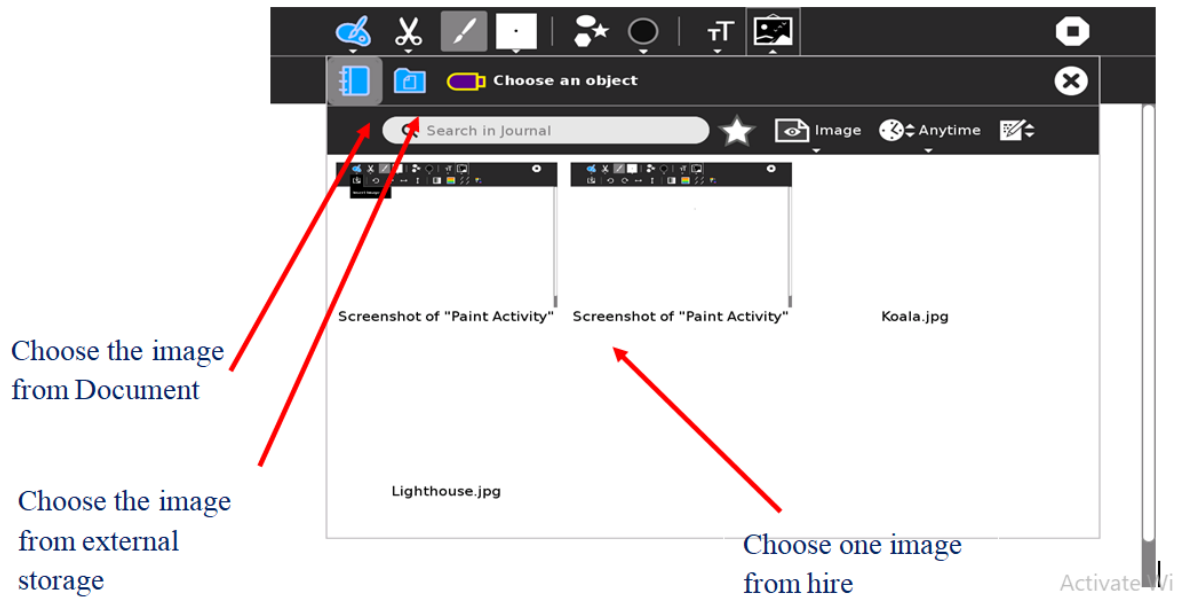
- Choosing a closed shape that you want.

- **Inserting image**

- Click on this icon  on toolbar
- Click on insert image



- Choose the image that you want

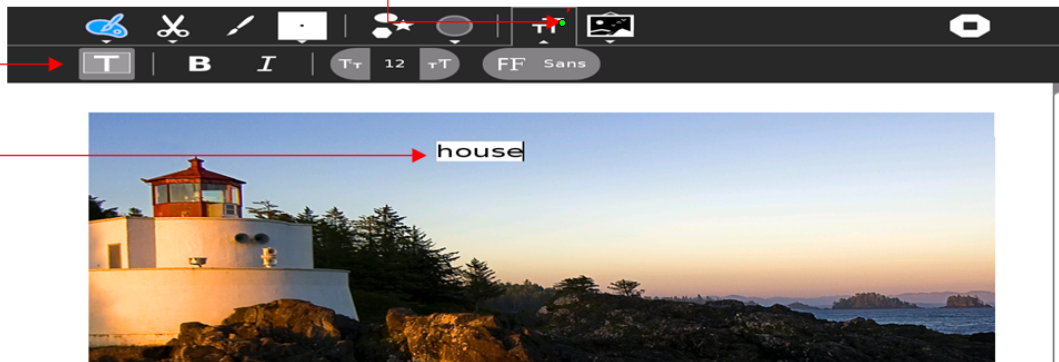


Click on the image you want

- **Renaming a picture**

Text: Simple text support allows you to include typographic language within your drawing.

- first click on TT,
- second click on T and
- Final place the cursor (which looks like A) where you need to type.



9.2.2 Gnome interface

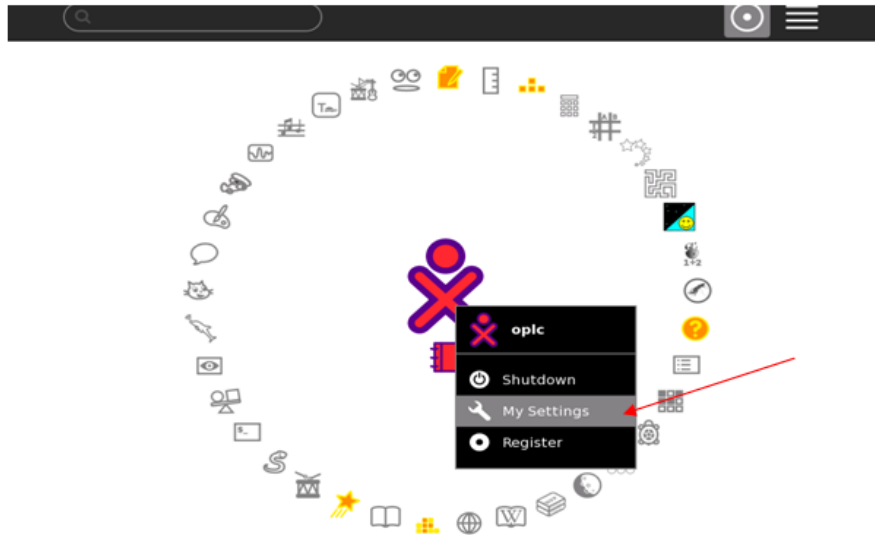
GNOME is a desktop environment and graphical user interface that runs on top of a computer operating system. It is composed entirely of free and open source software and is developed by both volunteers and paid contributors, the largest corporate contributor being Red Hat. It is an international project that includes creating software development frameworks, selecting application software for the desktop, and working on

the programs that manage application launching, file handling, and window and task management.

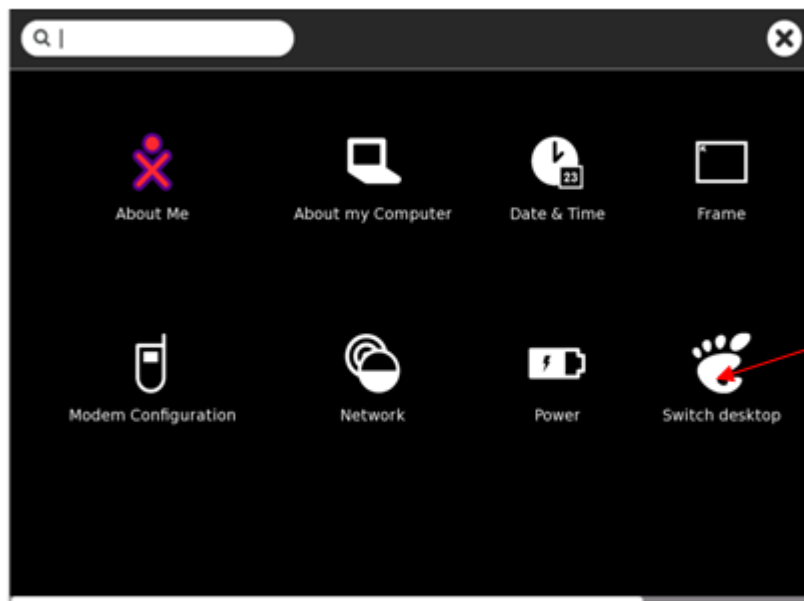


- Switch from sugar to gnome:

Click on **my settings**,



Click on **switch desktop**



Click on **switch to GNOME**

Switch desktop

Active desktop environment: **Sugar**

Sugar is the graphical user interface that you are looking at. It is a learning environment designed for children.

As an alternative to Sugar, you can switch to the GNOME desktop environment by clicking the button below.

 Switch to GNOME

You can return to Sugar later, by clicking on the **Switch to Sugar** icon on the GNOME desktop. This is also available from the GNOME **Applications** menu.

 Sugar

 GNOME

Click on **Restart now**



- **Gnome interface screen**

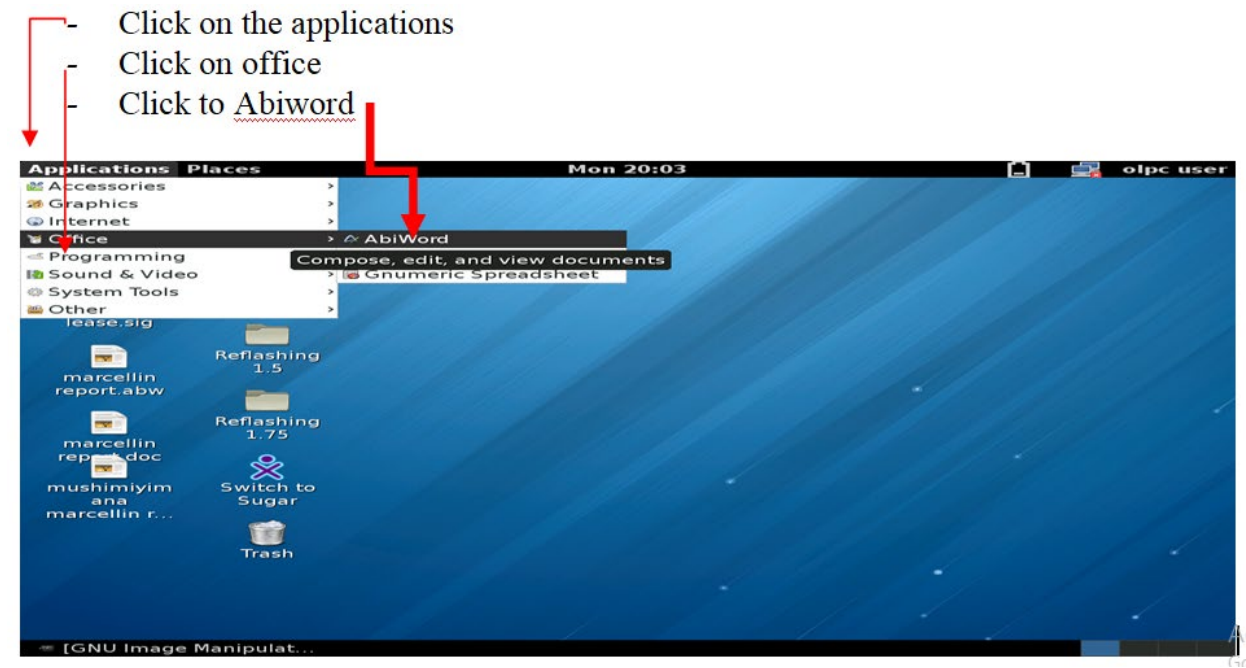


- **Gnome applications:**

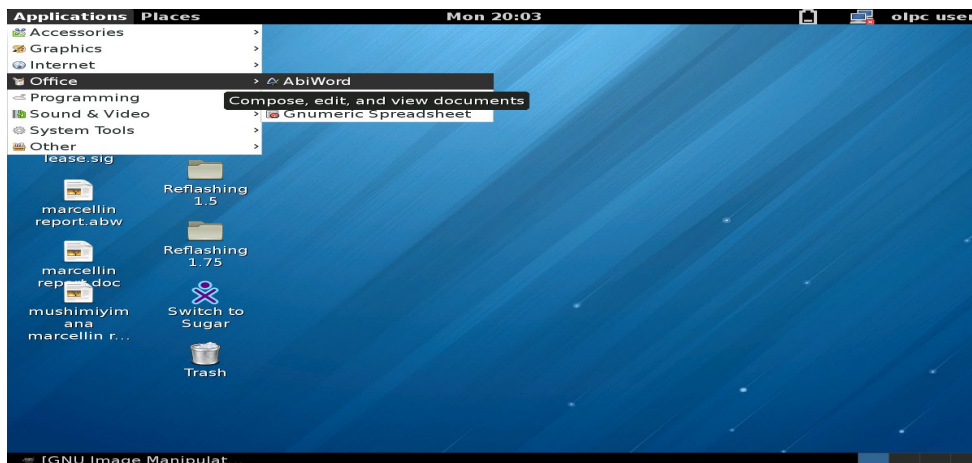
- a) Abiword**

Abiword supports both basic word processing features such as lists, indents and character formats, and more sophisticated features including tables, styles, page headers and footers, footnotes, templates, multiple views, page columns, spell checking, and grammar checking. The Presentation view of Abiword, which permits easy display of presentations created in Abiword on "screen-sized" pages, is another feature not often found in word processors.

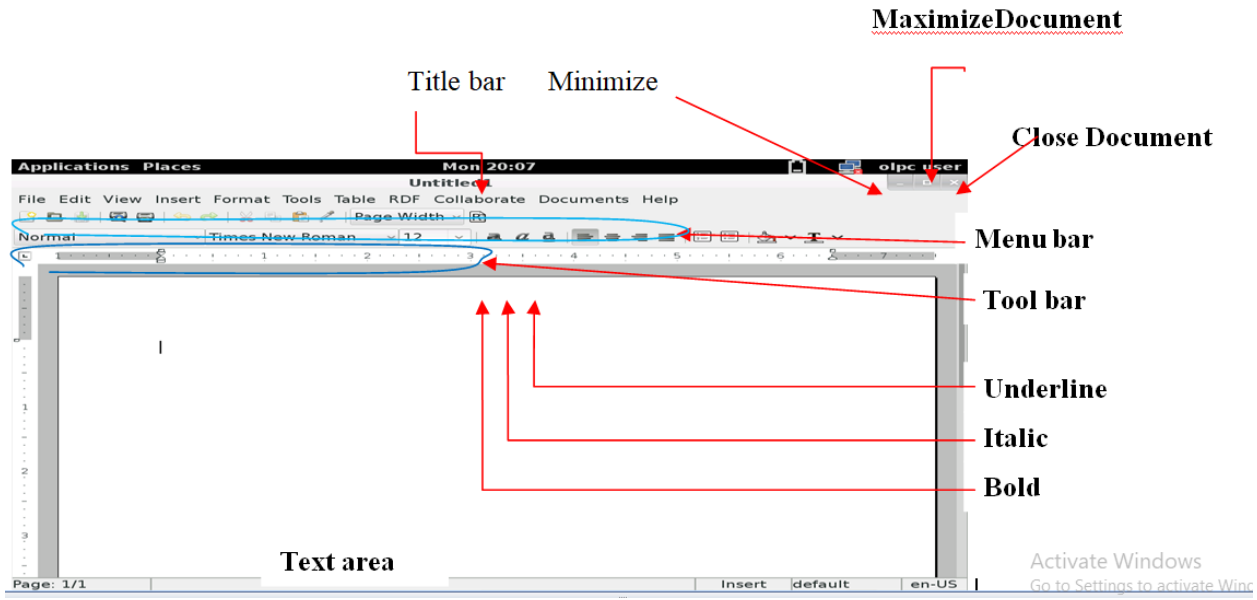
- **To open Abiword**



- Go to Gnome interface



- Identification of elements of Abiword window

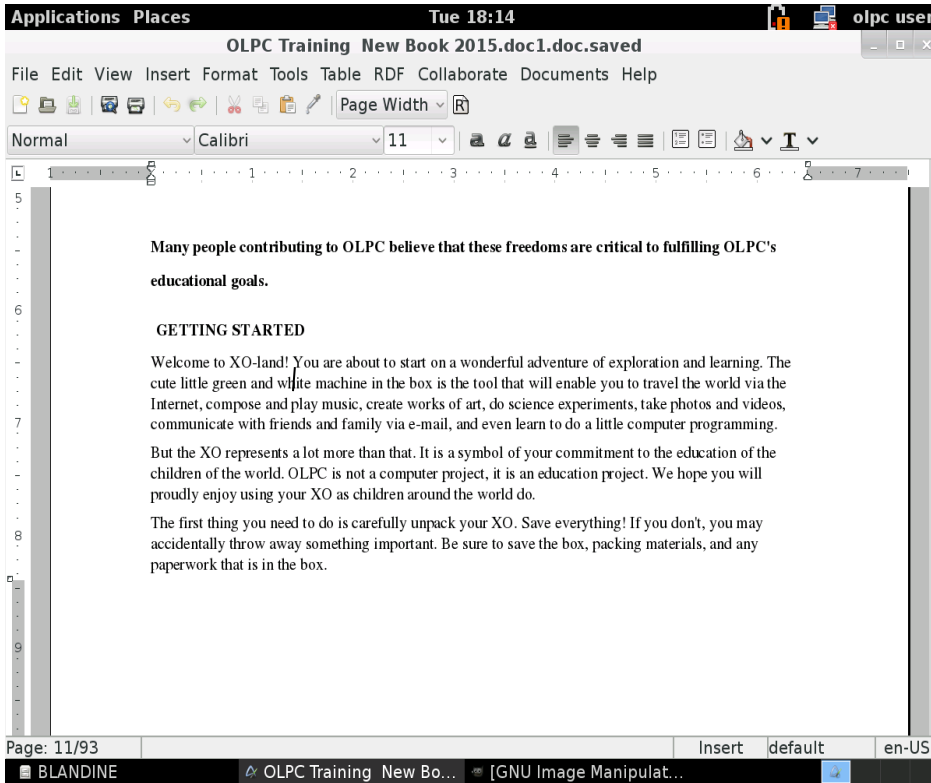


- Text formatting

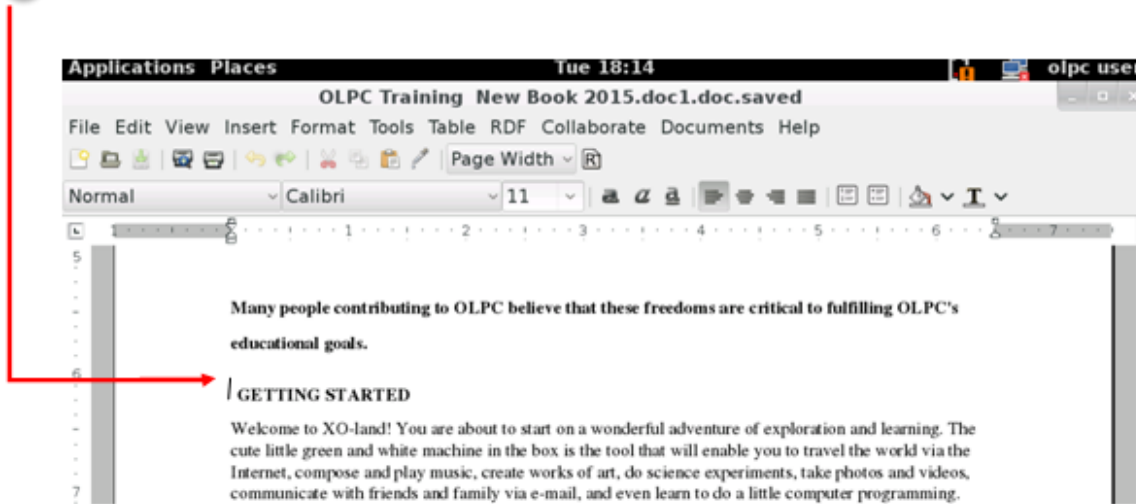
Font color, Font style, Font size, Underline style, Underline color, Font faces (Character.

N.B: Before you make any change of text, make a selection

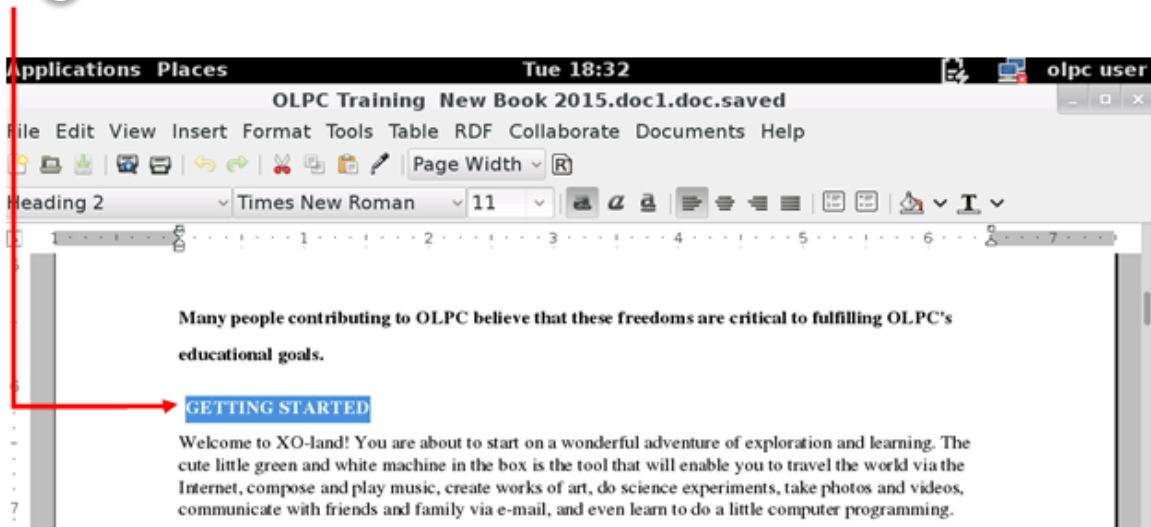
Example: Write some text



Place the cursor in front of the word at the beginning of selection

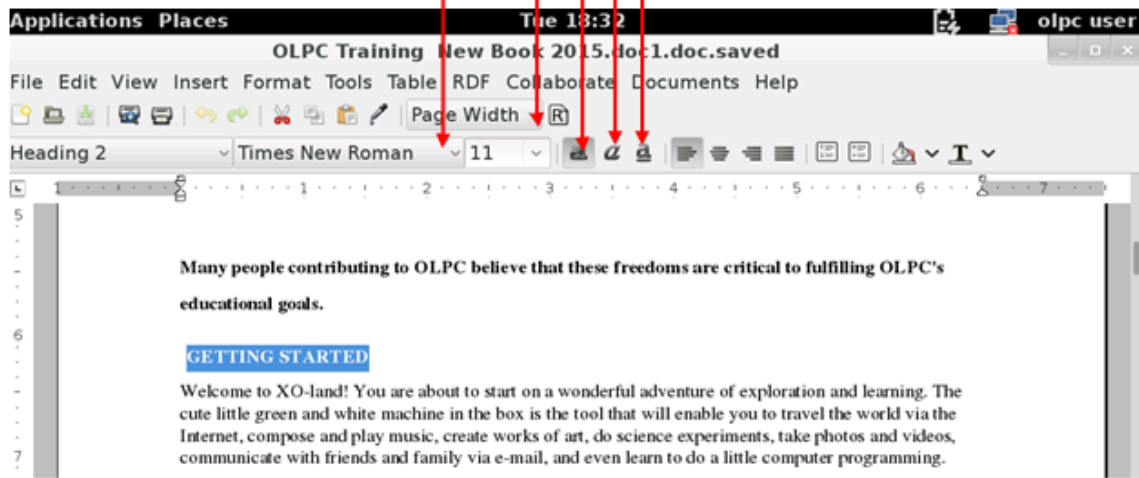


While holding the mouse click drag the cursor up to the end of selection

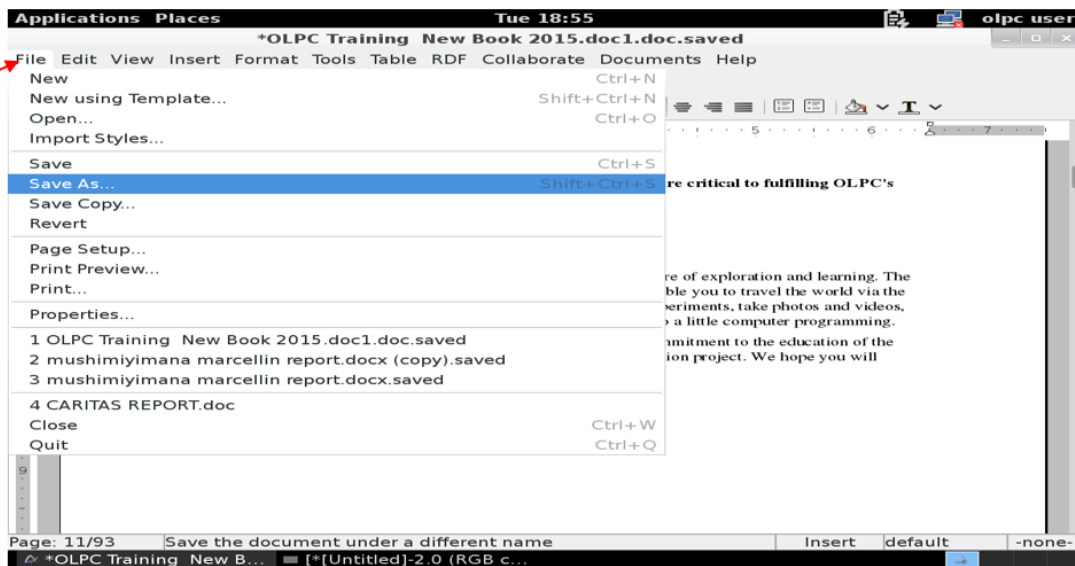


Release the mouse click

- **Underline:** click on a
- **Italic:** Click on *a*
- **Bold:** Click on **a**
- **Font size**
- **Font style**



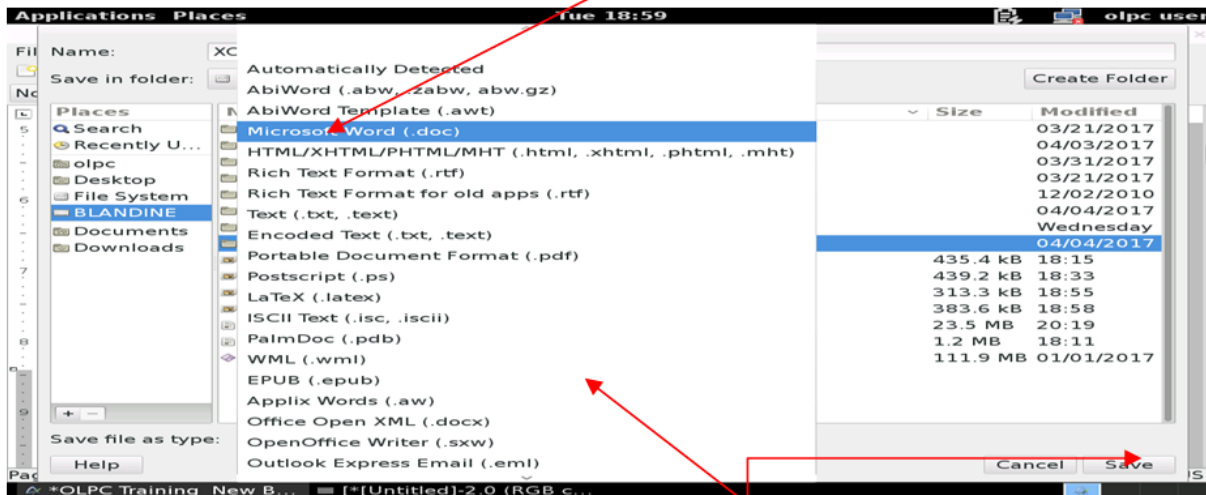
- **To save your document**
 - Click on **File**
 - Choose **Save As**



- Choose where you want to save your document
- Rename your document



- In save file as type, choose “Microsoft Word(.doc)



- Finally, click Save

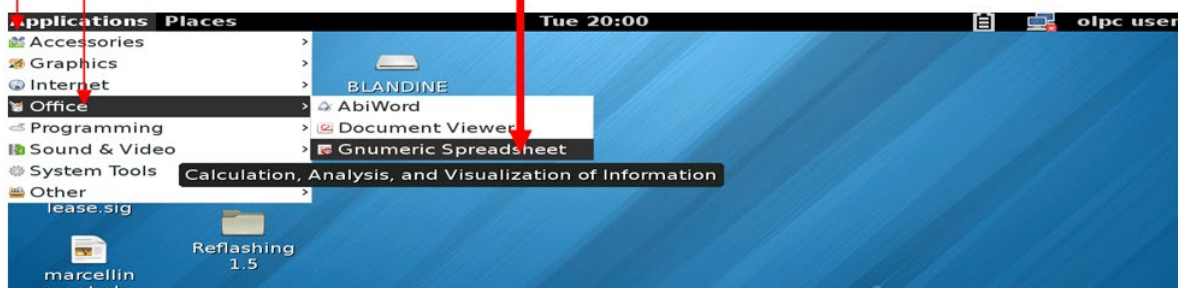
Different type file

b) Gnumeric spreadsheet

Numeric is a spreadsheet, a computer program used to manipulate and analyze numeric data. Numeric can help you keep track of information in lists, organize numeric values in columns and rows, perform and update complex calculations by defining each step of the calculation and modifying particular steps subsequently, create and display or print graphical plots of data using bar plots, line graphs, pie charts or radar charts, implement complex optimization modeling or perform many other tasks involving numbers, dates, times, names or other data.

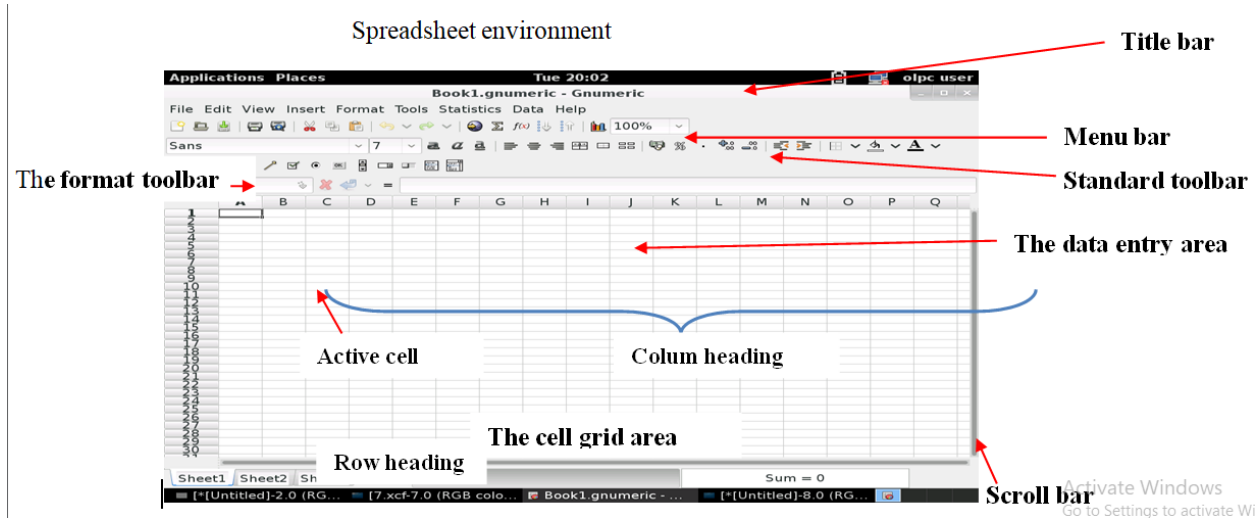
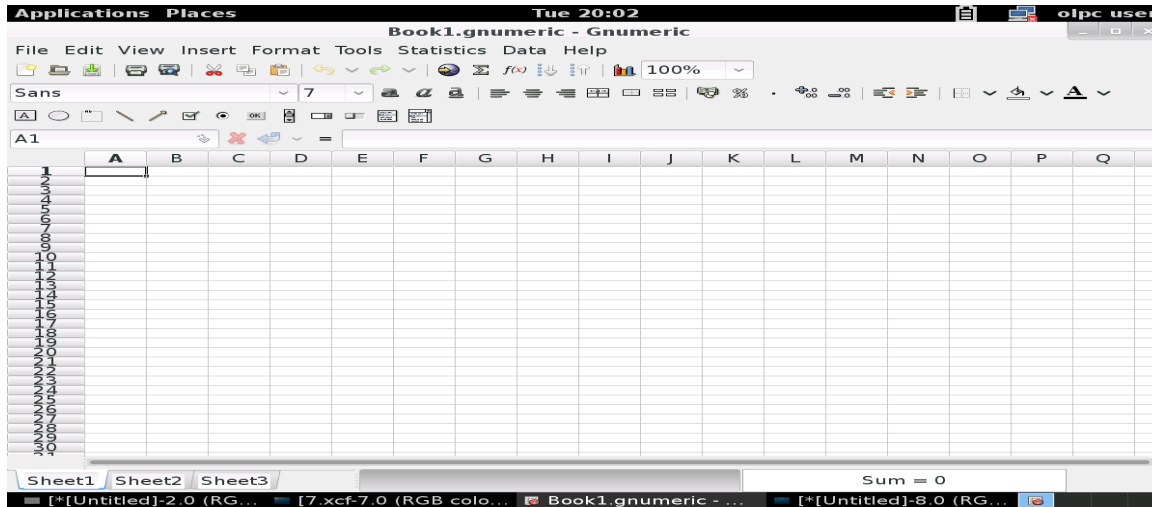
To open spreadsheet:

- Go to Gnome interface
- Click on the applications
- Click on office
- Click to Numeric Spreadsheet



Activat

After Click to Spreadsheet, you get this window:



The part names are listed below along with a reference to the section that discusses that element. If you are reading this document on a computer, you may be able to click on a reference to jump to that section of the manual.

- **The menu bar:** provides access to the core functions of GNOME. Almost everything that you can do in Numeric you can do through the menus. We discuss the menus and menu bar in
- **The standard toolbar:** provides shortcuts for the most used items in the menus. We discuss the toolbars and this toolbar in particular
- **The format toolbar:** changes the display properties of data in the workbook.
- **The data entry area:** is useful for the modification of complex formulas.

- **The cell grid area:** lies in the middle of all the rest. The cell area includes the row and column labels, the scrollbars and the tabs below.
- **Mathematical operators.**

Using the sum function in spreadsheet :

- Select the cell where you'd like the answer to populate

No	NAMES	MATH/50	KINY/50	SUM	%
1	deny	40	32		
2	bety	38	14		
3	jane	43	31		
4	alphonse	20	20		
5	peter	43	47		

- Type the equals sign then SUM. Like this: =SUM

No	NAMES	MATH/50	KINY/50	SUM	%
1	deny	40	32	=SUM	
2	bety	38	14		
3	jane	43	31		
4	alphonse	20	20		
5	peter	43	47		

Type out the first cell reference, then a colon, then the last cell reference. Like this: =Sum (C5:E5).

No	NAMES	MATH/50	KINY/50	SUM	%
1	deny	40	32	=SUM(C5:E5)	
2	bety	38	14		
3	jane	43	31		
4	alphonse	20	20		
5	peter	43	47		

- Select the cell where you'd like the answer to populate

	A	B	C	D	E	F	G	H	I	J
1										
2				LIST OF STUDENTS.						
3										
4	No	NAMES	MATH/50	KINY/50	SUM	%				
5	1	deny	40	32						
6	2	bety	38	14						
7	3	jane	43	31						
8	4	alphonse	20	20						
9	5	peter	43	47						

- Type the equals sign then SUM. Like this: =SUM

	A	B	C	D	E	F	G	H	I	J
1										
2				LIST OF STUDENTS.						
3										
4	No	NAMES	MATH/50	KINY/50	SUM	%				
5	1	deny	40	32	=SUM					
6	2	bety	38	14						
7	3	jane	43	31						
8	4	alphonse	20	20						
9	5	peter	43	47						

- Press enter. Spreadsheet will add up the numbers in cells C5 to E5

	A	B	C	D	E	F	G	H	I	J
1										
2				LIST OF STUDENTS.						
3										
4	No	NAMES	MATH/50	KINY/50	SUM	%				
5	1	deny	40	32	72					
6	2	bety	38	14	52					
7	3	jane	43	31	74					
8	4	alphonse	20	20	40					
9	5	peter	43	47	90					

9.4. Practice

ACTIVITY 9.1.

1. How many interfaces does the XO Laptop have?
2. If you want to save a document, you click on: a) Insert b) File c)Open

MODULE 10: PROGRAMMING FOR CHILDREN

Programming is the art of writing instructions to tell a computer what to do. A set of instructions is called a program. The instructions are written in what's known as a programming language, and there are thousands to choose from.

10.1. Scratch activity

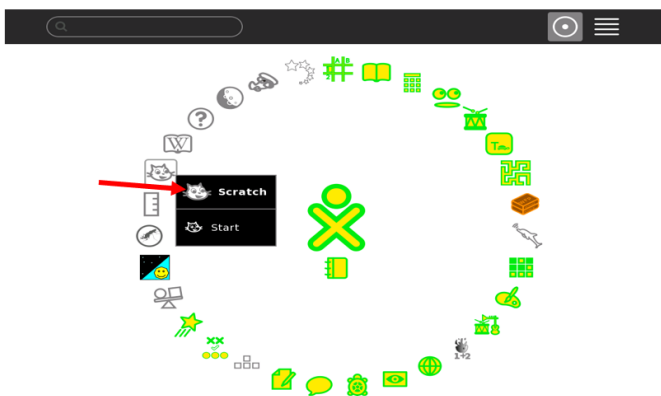
Scratch is a programming language that is perfect for making **games, animations, interactive stories** and other visually rich programs.

a) Basic Ingredients of a scratch project

- Scratch projects are made up of objects called **sprites**.
- You can change how a sprite looks by giving it a different **costume**.
- You can make a sprite look like a person or a train or a butterfly or anything else.
- You can use any image as a costume: you can draw an image in the paint editor, import an image from your hard disk, or drag in an image from a website.
- You can give instructions to a sprite, telling it to move or play music or react to other sprites.
- To tell a sprite what to do, you snap together graphic **blocks** into stacks, called **scripts**. When you double-click on a script, Scratch runs the blocks from the top of the script to the bottom.

b) Get started with scratch

- click on the scratch icon
- click start to open scratch activity

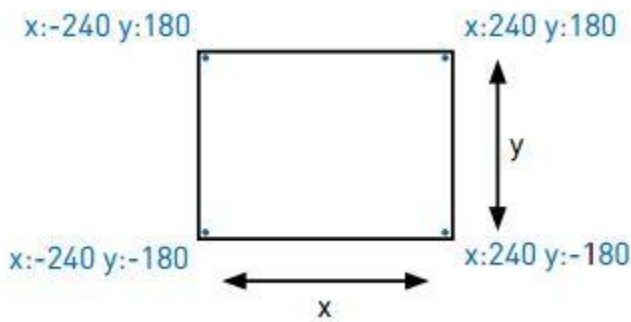


c) Scratch interface:



- Stage

The **Stage** is where you see your stories, games, and animations come to life. Sprites move and interact with one another on the stage. The stage is 480 units wide and 360 units tall. It is divided into an x-y grid. The middle of the stage has an x-coordinate of 0 and a y-coordinate of 0.



mouse x: -601
mouse y: -364

To find out x-y positions on the stage, move the mouse around and look at the **mouse x-y display** just below the stage, on the right.



Click the **Presentation Mode** button to see projects at full-screen size. To exit Presentation Mode, press the Esc key.

- **New sprite button**

When you start a new Scratch project, it begins with a single cat sprite. To create new sprites, click on these buttons:



Paint your own sprite



Select a costume for a new sprite – or import an entire sprite

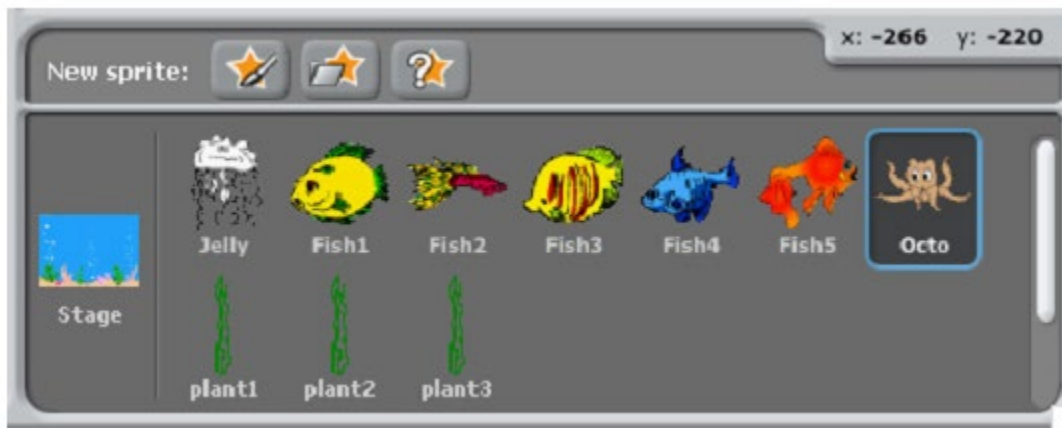


Get a surprise sprite

If you want to delete a sprite, select the scissors from the Toolbar and click on the sprite. Or right-click on the sprite and select “delete” from the pop-up menu.

- **Sprite list**

The **Sprite List** displays thumbnails of all of the sprites in the project. For each sprite, it shows the sprite’s name, how many scripts it has, and how many costumes it has.



To see and edit a sprite’s scripts, costumes, and sounds, click on the sprite’s thumbnail in the Sprite List – or double-click on the sprite itself on the Stage. (The selected sprite is highlighted and outlined in blue in the Sprite List.)

To show, export, duplicate, or delete a sprite, right-click (Mac: Ctrl+click) on the sprite’s thumbnail in the Sprite List. To show a sprite that is of the Stage or hidden, Shift click

on the sprite's thumbnail in the Sprite List - this will bring the sprite to the middle of the Stage and show it. You can rearrange the sprites in the Sprite List by dragging the thumbnails.


Just as a sprite can change its appearance by switching costumes, the Stage can change its appearance by switching **backgrounds**. To see and edit the scripts, backgrounds, and sounds associated with the Stage, click on the Stage icon at the left of the Sprite List.


- **Block palette and scripts area**

To program a sprite, drag blocks from the **Blocks Palette** to the **Scripts Area**. Create scripts (programs) by snapping blocks together into stacks. Click anywhere on the stack to run the whole script, from top to bottom. To find out what a block does, right-click (Mac: Ctrl+click) on it, then select *help* from the popup menu.

When you drag a block around the Scripts Area, a white highlight indicates where you can drop the block and form a valid connection with another block. To move a stack, pick it up from the top block. If you drag out a block from the middle of a stack, all of the blocks beneath it will come along with it.

Some blocks have white editable text files inside, such as .

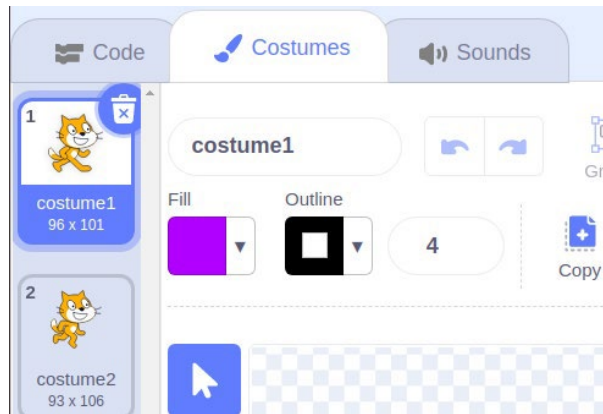
To change the value, click inside the white area, delete the existing number, and type a new number. You can also drop rounded blocks, like , inside these areas. Some blocks have pull-down menus, such as

. Just click on the to see the menu, and then click again to make a selection.

- **Costumes**

Click the **Costumes** Tab to see and edit the sprite's costumes.

This Sprite has two costumes. The sprite's current costume (girl-walking) is highlighted. To switch to a different costume, simply click on the thumbnail of the costume you want.



There are four ways to create new costumes:

- Click **Paint** to paint a new costume in the Paint Editor.
- Click **Import** to import an image file from your hard disk.
- Click **Camera** to take photos from a webcam (built into or connected to your computer). Each time you click the button (or press the spacebar), it takes a photo.
- Drag in one or more images from the web or your desktop. Scratch recognizes many image formats: JPG, BMP, PNG, GIF (including animated GIF). Each costume has a costume number (displayed to its left). You can rearrange the order of the costumes by dragging the thumbnails. The costume numbers update if you change their order. Right-click (Mac: Ctrl+click) on a costume thumbnail to convert the costume into a new sprite, or to export a copy of the costume as a separate file.

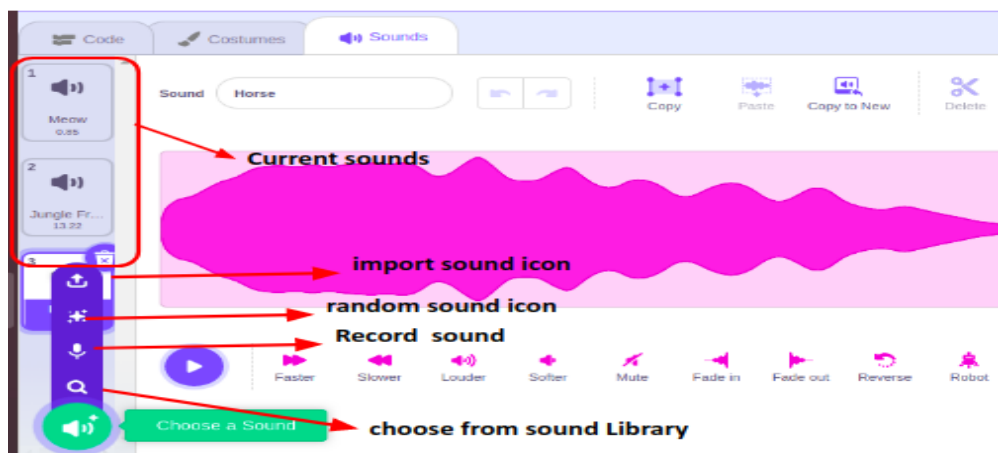
- **Sounds**

- Click the Sounds Tab to see the sprites sounds.



You can record new sounds and import sound files. Scratch can read MP3 files and uncompressed WAV, AIF, and AU files (encoded with 8-bits or 16-bits per sample, but not 24-bits per sample).

- **Current Sprite info**



Current Sprite Info shows a sprite's

- Name,
- x-y position,
- And direction.

You can type in a new name for the sprite.

The sprite's direction indicates which direction the sprite will move when it runs a move block (0=up, 90=right, 180=down, -90=left).


The blue line on the thumbnail shows the sprite's direction. You can drag this line to change the sprite's direction.


Double-click on the sprite to set the direction back to its original state (direction=90).

Click **Export Sprite** to save the sprite as a separate file, for use in another project.

- **Rotation style**

Click the **Rotation Style** buttons to control how the costume rotates as the sprite changes its direction.

 Rotate: The costume rotates as the sprite changes direction.

 Left-right flip: The costume faces either left or right.

 No-rotate: The costume never rotates (even as the sprite changes direction)

Toolbar



Click on the **Toolbar** to select a tool, then click on other objects to perform an action.

- **Arrow:** Normal mode. Pick up and move sprites and blocks.
- **Copy:** Duplicate sprites, costumes, sounds, blocks, and scripts.
- **Delete:** Delete sprites, costumes, sounds, blocks, and scripts.
- **Grow:** Make sprites bigger.
- **Shrink:** Make sprites smaller.

MENU



- **New, Open, Save,** and **Save as** do what you would expect them to do.
- **Share!** Uploads your project to the Scratch website (<http://scratch.mit.edu>)
- **Undo** allows you to retrieve the last block, script, or sprite you deleted (but does not allow you to undo most other actions).

Language allows you to select the language used on the Scratch blocks. (For now, the menu items and tabs are available only in English.)

- **Extras** give a pop-up menu with special features:
- **Import Project:** Bring all of the sprites and backgrounds from another project into this project. This feature is useful for combining sprites from multiple projects.
- **Start Single Stepping:** The Scratch program runs one step at a time, highlighting each block as it runs. This feature can be useful for finding bugs in programs, and for helping new programmers understand the flow of a program.
- **Compress Sounds:** Compress sounds used in the project, to reduce the overall file size of the project.
- **Compress Images:** Compress images used in the project, to reduce the overall file size of the project.
- **Want Help?** Brings up a page with links to reference materials, tutorials, and frequently asked questions. To get help on an individual block, right click on the block and select help from the pop-up menu.

d) **Block descriptions**











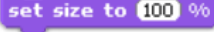





The Scratch blocks are organized into eight color-coded categories.

These categories and their functions in Scratch project are:.



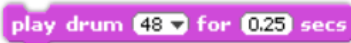
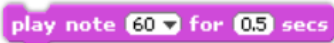

- **CONTROL:** Use for controlling the blocks within your scripts.
- **MOTION:** Use to move sprites in the stage.
- **LOOKS:** Use for display text.
- **SENSING:** They let you identify what's happening at a given point and make your sprites or background respond.
- **SOUND:** Use for import sound in the scratch project.
- **OPERATORS:** Let you make comparisons between or perform arithmetic functions on different values.
- **PEN:** Use for writing in scratch project
- **VARIABLE:** Let you define values for a variable and then use it in your project.

Motion	
	Moves sprite forwards or backwards
	Rotates sprite clockwise
	Rotates sprite counterclockwise
	Points sprite in the specified direction 0=up, 90=right, 180=down, -90=left
	Points sprite towards mouse-pointer or another sprite
	Moves sprite to specified x and y position on Stage
	Moves sprite to the location of the mouse-pointer or another sprite
	Moves sprite smoothly to a specified position over specified length of time
	Changes sprite's x-position by specified amount
	Sets sprite's x-position to specified value
	Changes sprite's y-position by specified amount
	Sets sprite's y-position to specified value
	Turns the sprite in the opposite direction when it touches the edge of the stage
<input type="checkbox"/> 	Reports sprite's x-position (ranges from -240 to 240)
<input type="checkbox"/> 	Reports sprite's y-position (ranges from -180 to 180)
<input type="checkbox"/> 	Reports sprite's direction 0=up, 90=right, 180=down, -90=left












Looks

 switch to costume <input type="text" value="costume1"/>	Changes sprite's appearance by switching to different costume
 next costume	Changes sprite's costume to next costume in the costume list (If at end of the costume list, jumps back to first costume)
 say Hello! for 2 secs	Displays sprite's speech bubble for specified amount of time
 say Hello!	Displays sprite's speech bubble (You can remove speech bubble by running this block without any text)
 think Hmm... for 2 secs	Display sprite's thought bubble for specified amount of time
 think Hmm...	Displays sprite's thought bubble
 change <input type="text" value="color"/> effect by 25	Changes a visual effect on a sprite by specified amount (Use pull-down menu to choose effect)
 set <input type="text" value="color"/> effect to 0	Sets a visual effect to a given number Most visual effects range from 0 to 100
 clear graphic effects	Clears all graphic effects for a sprite
 change size by 10	Changes sprite's size by specified amount
 set size to 100 %	Sets sprite's size to specified percentage of original size
 <input type="text" value="size"/>	Reports sprite's size, as % of original size
 show	Makes sprite appear on the Stage
 hide	Makes sprite disappear from the Stage When sprite is hidden, other sprites can not detect it with touching? block
 go to front	Moves sprite in front of all other sprites
 go back 1 layers	Moves sprite back a specified number of layers, so that it can be hidden behind other sprites

Sound

	Starts playing a sound (selected from pull-down menu), and immediately goes on to the next block (even as the sound is still playing)
	Plays a sound and waits until the sound is finished playing before continuing with next block
	Plays a drum sound (selected from pull-down menu) for specified number of seconds
	Plays a musical note (higher numbers for higher pitches) for specified number of seconds
	Sets the type of instrument that the sprite uses for play note blocks. (Each sprite has its own instrument.)














Pen















	Clears all pen marks and stamps from the Stage
	Puts down sprite's pen, so it will draw as it moves
	Pulls up sprite's pen, so it won't draw as it moves
	Sets the pen's color, based on choice from color picker
	Changes the pen's color by specified amount
	Sets the pen's color to a specified value (pen-color = 0 is at red end of rainbow, pen-color = 100 is at blue end of rainbow)
	Changes the pen's shade by specified amount
	Sets the pen's shade to a specified amount (pen-shade = 0 is very dark, pen-shade = 100 is very light)
	Changes the thickness of the pen
	Sets the thickness of the pen
	Stamps the sprite's image onto the Stage

Control

	Runs script below when green flag is clicked
	Runs script below when specified key is pressed
	Runs script below when sprite is clicked
	Waits specified number of seconds, then continues with next block
	Runs the blocks inside over and over
	Runs the blocks inside a specified number of times
	Sends a message to all sprites, triggering them to do something, and waits until they all finish before continuing with next block
	Sends a message to all sprites, then continues with the next block (without waiting for the triggered scripts to finish)
	Runs script below when it receives specified broadcast message
	Continually checks to see if condition is true; whenever it is, runs the blocks inside
	If condition is true, runs the blocks inside
	If condition is true, runs the blocks inside the if portion; if not, runs the blocks inside the else portion
	Waits until condition is true, then runs the blocks that follow
	Checks to see if condition is true; if so, runs blocks inside and checks condition again. If condition is not true, goes on to the blocks that follow.
	Stops the script
	Stops all scripts in all sprites

Sensing

	Reports the x-position of the mouse-pointer
	Reports the y-position of the mouse-pointer
	Reports true if the mouse button is being pressed down
	Reports true if the specified key is pressed
	Reports true if sprite is touching specified sprite, edge, or mouse-pointer (selected from pull-down menu)
	Reports true if sprite is touching specified color Click on color patch, then use eyedropper to select color
	Reports true if first color (within sprite) is touching the second color (in background or another sprite) Click on color patch, then use eyedropper to select color
	Reports distance from the specified sprite or mouse-pointer
	Sets the timer to zero
<input type="checkbox"/> 	Reports the value of the timer (in seconds) Note: The timer is always running
<input type="checkbox"/> 	Reports the volume (from 1-100) of sounds detected by the computer microphone
<input type="checkbox"/> 	Reports true if computer microphone detects a sound volume greater than 30 (on scale of 1-100)
<input type="checkbox"/> 	Reports the value of specified sensor To use this block, you need to have a "ScratchBoard" connected to your computer. See http://scratch.mit.edu/scratchboard
<input type="checkbox"/> 	Reports true if specified sensor is pressed To use this block, you need to have a "ScratchBoard" connected to your computer. See http://scratch.mit.edu/scratchboard

Numbers	
	Adds two numbers
	Subtracts one number from another
	Multiplies two numbers
	Divides one number by another
	Picks a random integer within the specified range
	Reports true if first number is less than second number
	Reports true if the two numbers are equal
	Reports true if first number is greater than second number
	Reports true if both conditions are true
	Reports true if either condition is true
	Reports true if condition is false; reports false if condition is true
	Reports the absolute value of a number
	Reports the remainder of dividing the first number by the second number
	Reports the closest integer to a number

10.2. Turtle art activity

Turtle Art is a free, web-based coding platform that lets you make artistic designs and share your code sequences and images with friends.

Turtle Art allows students to use mathematical reasoning, problem solving, counting, measurement, geometry and computer programming to create beautiful images.

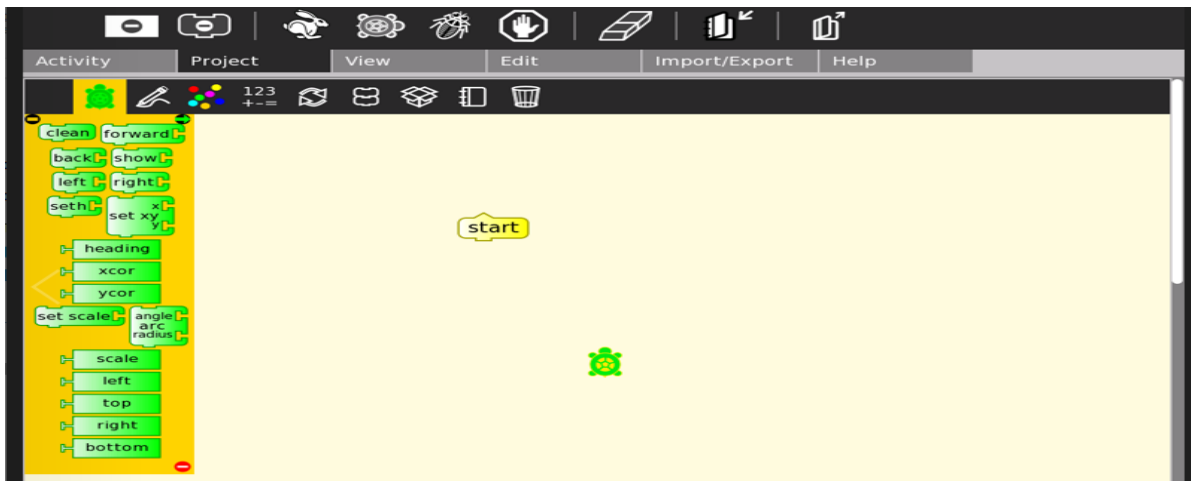
Play with Turtle Art to draw colorful art patterns using a turtle that accepts instructions for movement.

With visual programming blocks, you can snap together programs by compiling (combining) them in ways to create anything you can imagine.

This is a turtle icon in sugar interface



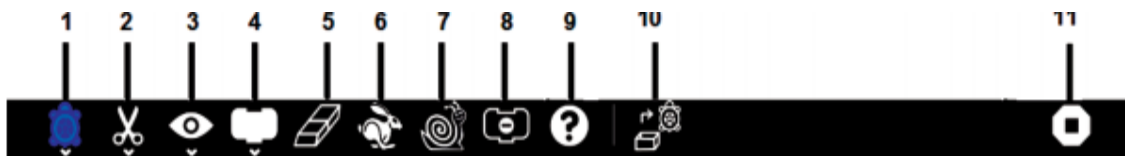
The Turtle Window



- **Elements of Turtle Art Window**

The Turtle Art window has the following elements.

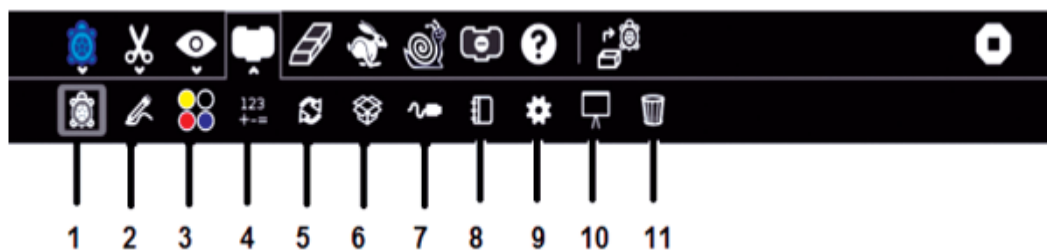
Main Toolbar the Main toolbar consists of the following tools:



1. Activity toolbar (includes sharing; saving/loading options);
2. Edit toolbar (includes copy and paste);
3. View toolbar (includes full-screen, coordinate overlays and turtle status);
4. Palette toolbar (includes all programming blocks);
5. Erase canvas;
6. Run project fast (rabbit);
7. Run project slow (snail);
8. Hide blocks (This button is replaced by the stop button when the project is running);
9. Help;
10. Load examples;
11. Stop activity

- **Palettes Toolbar**

To get the Palettes toolbar, click on the Block icon on the Main toolbar.



The palettes toolbar consists of the following palettes:

1. Turtle Palette
2. Pen Palette
3. Color Palette
4. Numbers Palette
5. Flow Palette
6. Blocks Palette
7. Sensors Palette
8. Media Palette

9. Extras Palette

10. Portfolio Palette

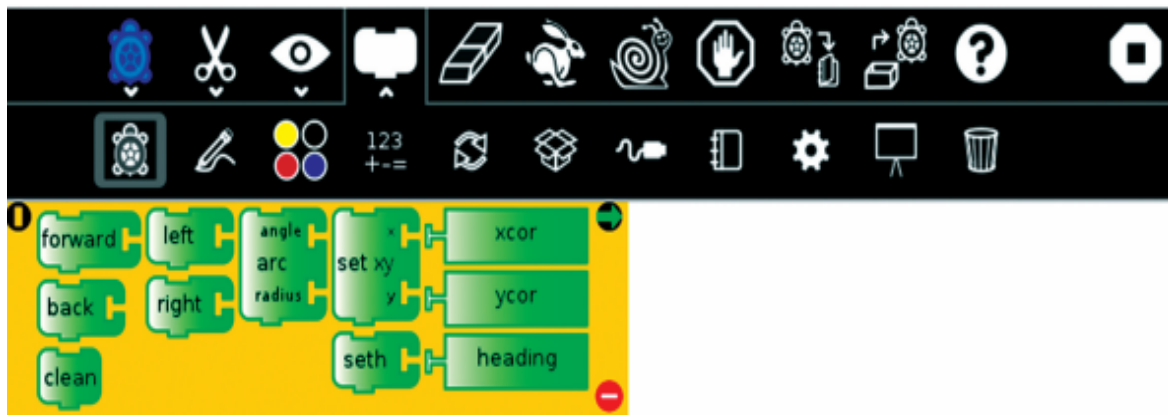
11. Trash Palette

12. Numbers Palette

13. Media Palette

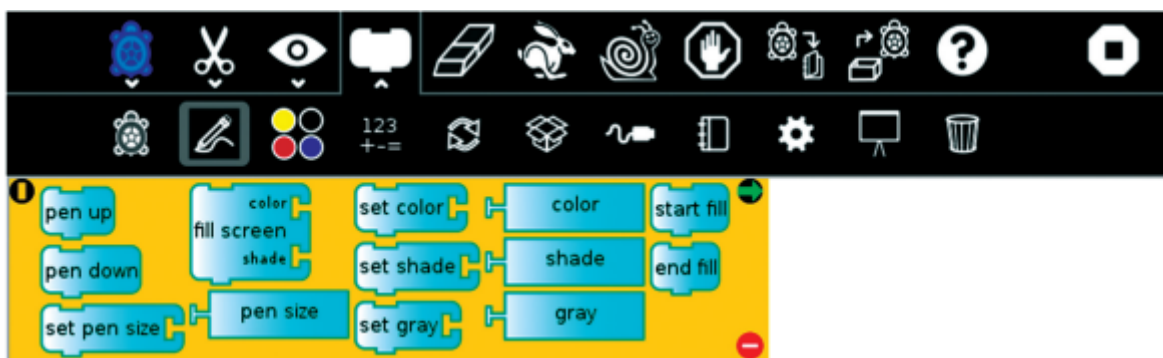
Each palette consists of blocks. A block is a command for the turtle. For example, there is a block to tell the turtle to go forward.

You can add blocks to your program by clicking on or dragging them from the palette to the main area. You can also delete a block by dragging it back onto the palette



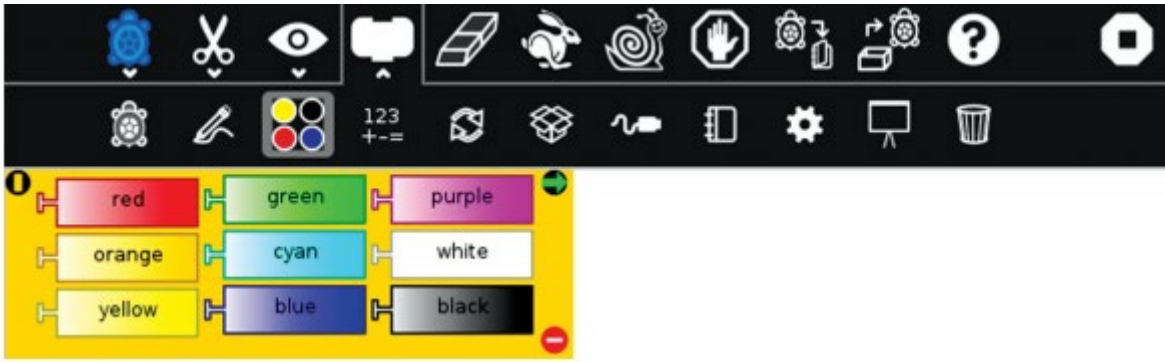
Pen Palette

Blocks available in the Pen palette are used to control the attributes of the Turtle's pen.



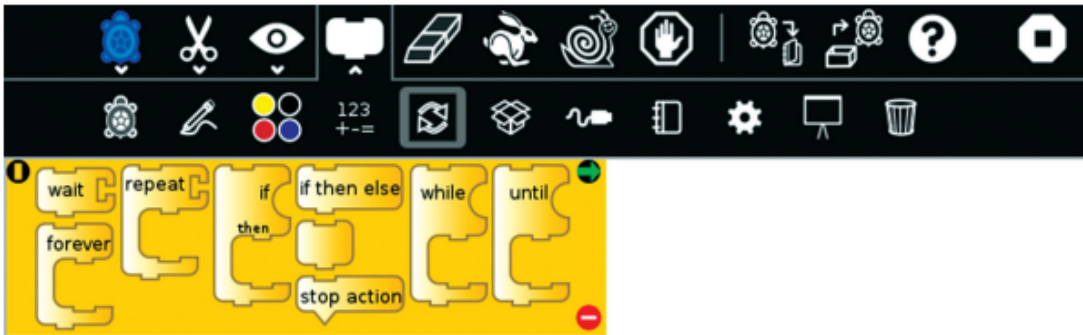
Color Palette

Blocks available in Color palette can be used with the set-pen-color block in place of a number block.



Flow Palette Blocks

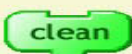






Available in Flow palette control the program flow.

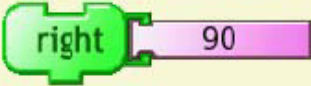

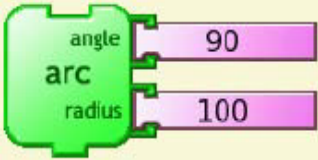
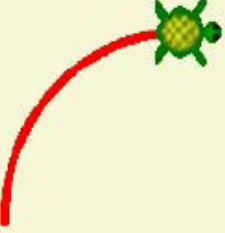


- **Using Turtle Art Instructions/Commands**

Here are some instructions you can use in Turtle Art.

(a) Forward: Using this command, you can move the turtle forward with the number of pixels entered.

	<p>clean - Clears the screen of all drawings and sends the turtle to the middle.</p>	
	<p>forward - Moves the turtle forward the number of pixels entered.</p>	
	<p>back - Moves the turtle backward the number of pixels listed.</p>	
	<p>left - Changes the turtle's direction to the turtle's left by the angle specified.</p>	

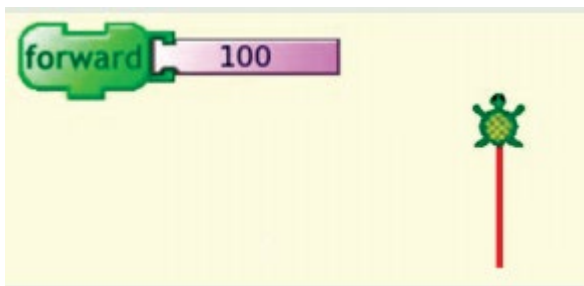
	<p>right – Changes the turtle’s direction to the turtle’s right by the angle specified.</p>	
	<p>arc – Draws part of a circle. The angle is the part of the circle the turtle draws. The radius determines the width (size) of the circle.</p>	

- **Drawing**

Using multiple blocks from the Turtle palette, we can draw lines (horizontal and vertical), square, rectangle and circle.

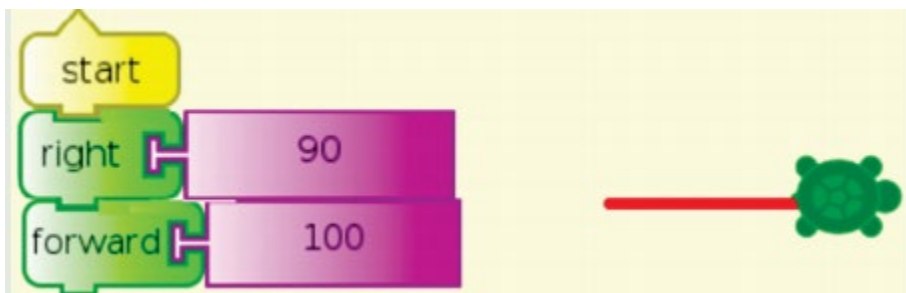
To draw a vertical line:

1. Move the turtle forward 100 spaces
2. To make the line longer change 100 to 400



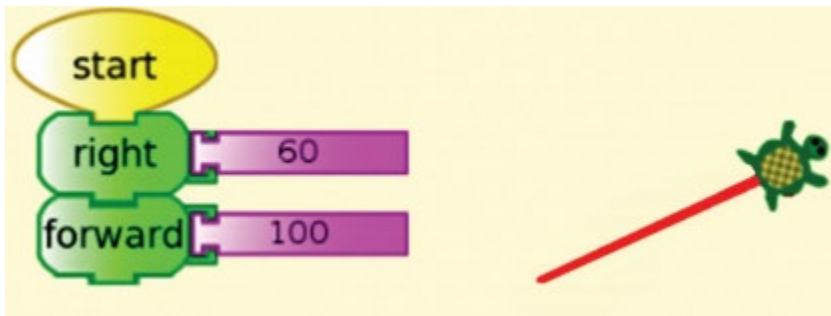
To draw a horizontal line:

1. Turn the turtle right 90 degrees.
2. Then move the turtle forward 100 spaces.

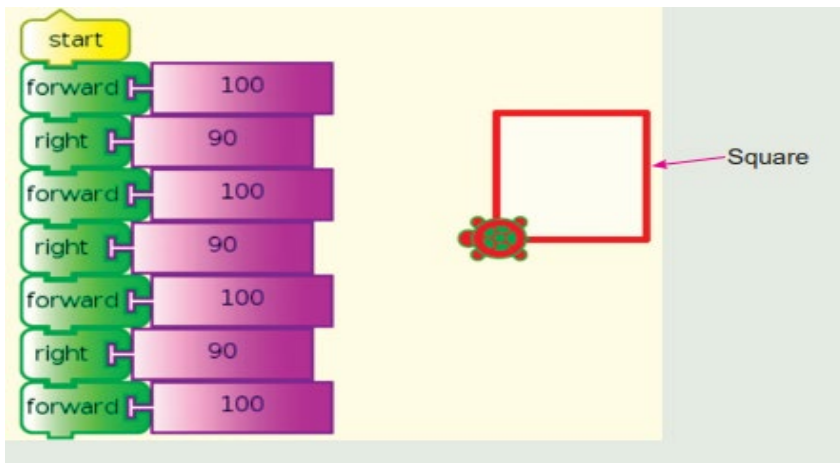


To draw an oblique line:

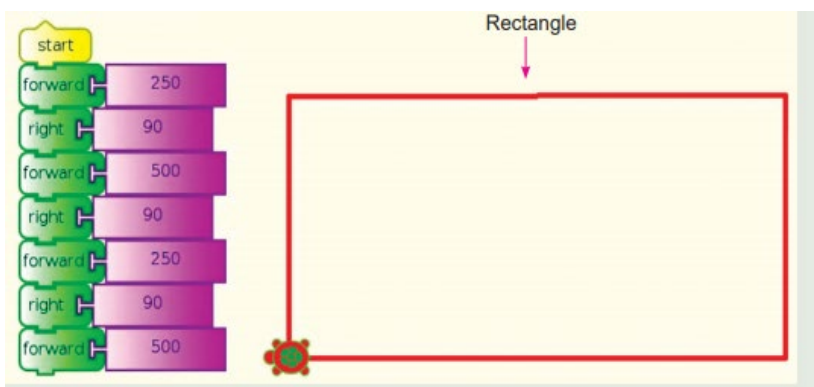
1. Turn the turtle right 60 degrees.
2. Then move the turtle forward 100 spaces.



To draw a rectangle:

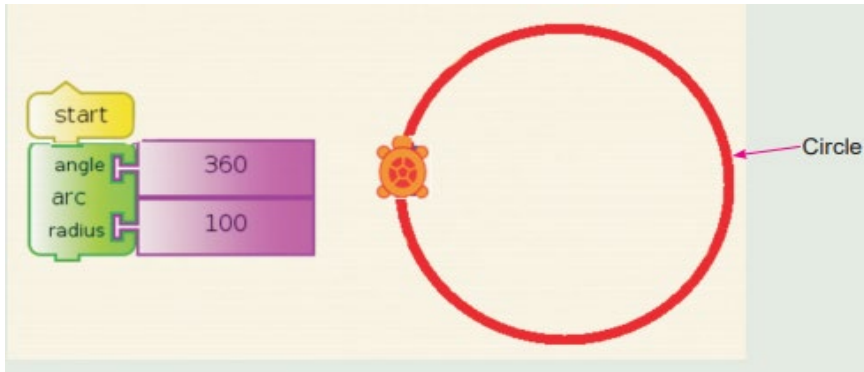


To draw a rectangle:



To draw a circle

Arc the turtle right 360 degrees with radius 100 spaces.



Using the Repeat command

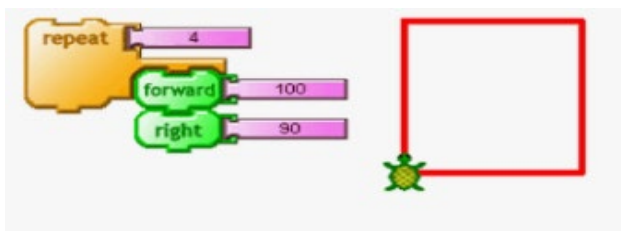
The repeat command helps you to avoid writing the same commands several times. When you use the Repeat command you should also use the command written on Start.



Any commands that are attached to the repeat will be repeated the number of times specified by the number on the top.

This example draws a circle then picks up the pen, moves forward 10 spaces then turns right 90 Degrees. This command repeats 4 times.

Square with repeat instructions



10.3. Etoys activity

Etoys is a child friendly computer environment and object-oriented prototype-based programming language for use in education. Etoys is a highly engaging programming environment that etoys lets you create interactive drawings and stories, models, simulations and games with text, graphics, and sound. This lets you explore ideas and learn by doing. With a drag and drop interface. The etoys home screen is the main project page you see when you open an etoys project. It is basically a playfield.



Screen of etoys

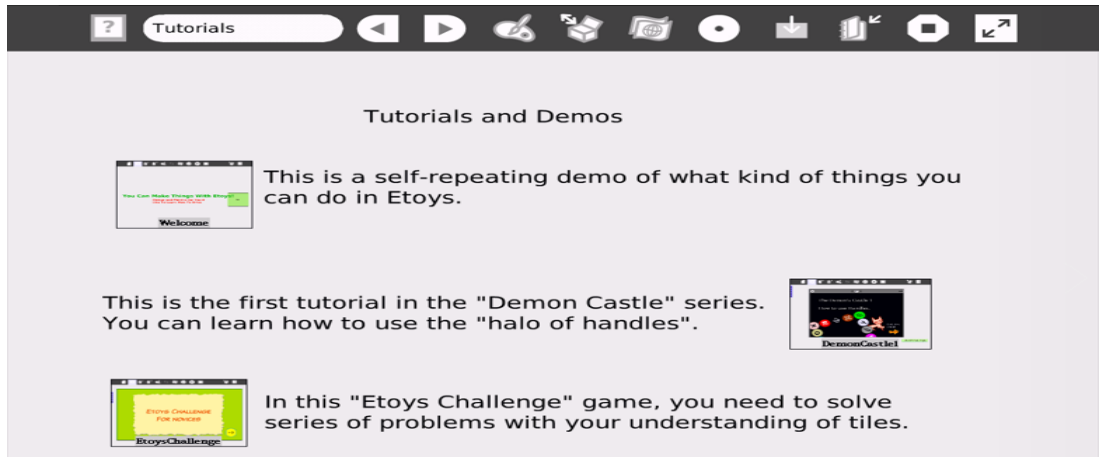


Etoys home page is composed of:

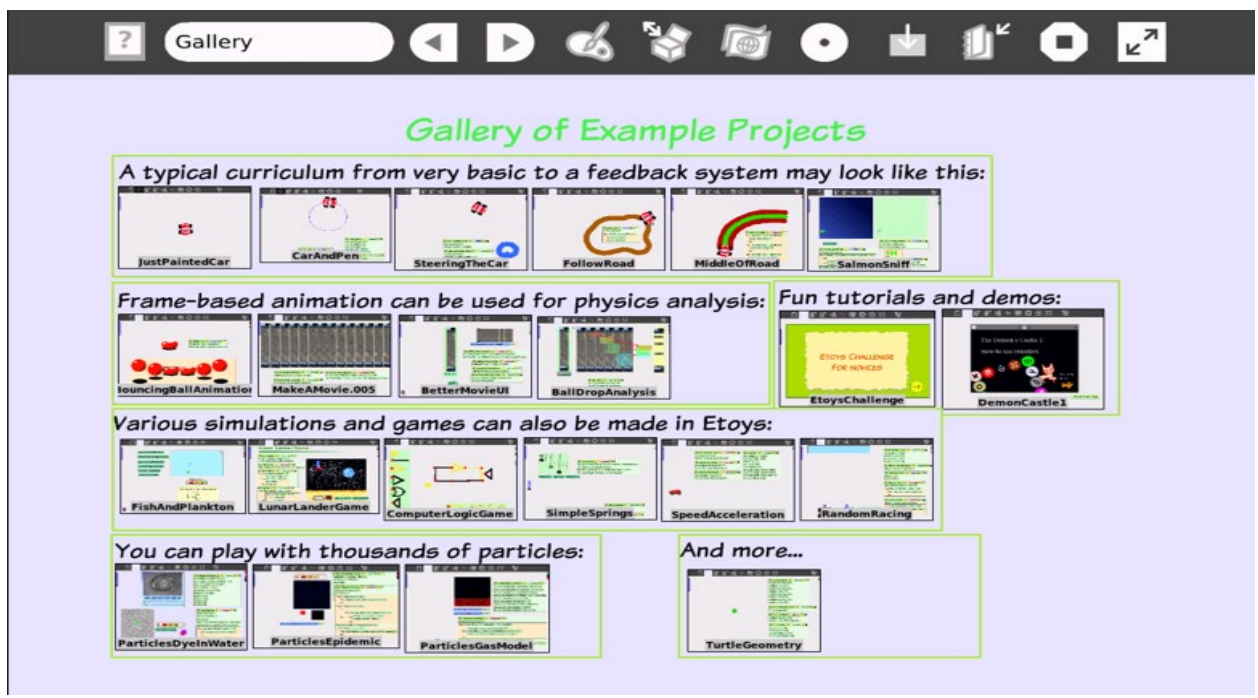
- Toolbar
- Three Clouds (Gallery of projects, Make a project, Tutorials and Demos)
- A running car
- An open Scripts
- **The toolbar** at the top of the screen includes basic navigation through Etoys. Each of these has a balloon help bubble that pops up if you hover over any item.



Tutorials and Demos: In this section you'll see three demos, of increasing difficulty. We recommend that if you are new to etoys, you start here



Gallery of Projects: If you want to see examples of what you can do with etoys, look at the various models shown here.



Make a Project: When you click on this cloud, you will see a blank screen. At the top is your menu. You'll even see two calls out bubbles giving you two places to start. If you hover over any item, you will see a call out bubble describing what that item does. This is a simple Project you can do in etoys



Click on the viewer handle to get the viewer

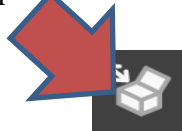


To create a book

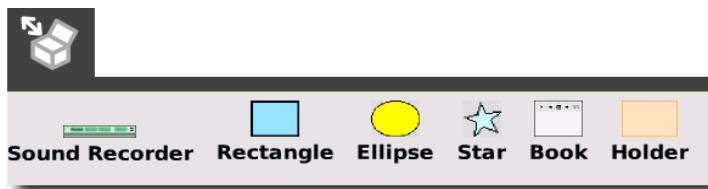
The BOOK is one of the most useful objects in etoys. You can use it to do Slideshows, class diaries and albums; register observations and even create your own animated book. The most interesting is that you can insert any kind of element (OBJECT) inside a BOOK. For example, you can add text, drawings and even animations in order to bring your book to live.

Steps to create a book

Click on supplies



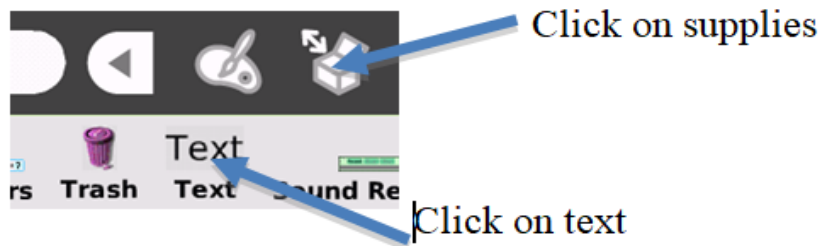
1. Once etoys is open, you can find the **BOOK** in the **SUPPLIES** box
2. When the **SUPPLIES** box opens, you will see the **BOOK** icon,



3. Now, just drag the **BOOK** icon over the **SCREEN** to create a new book

Adding Text to the Book

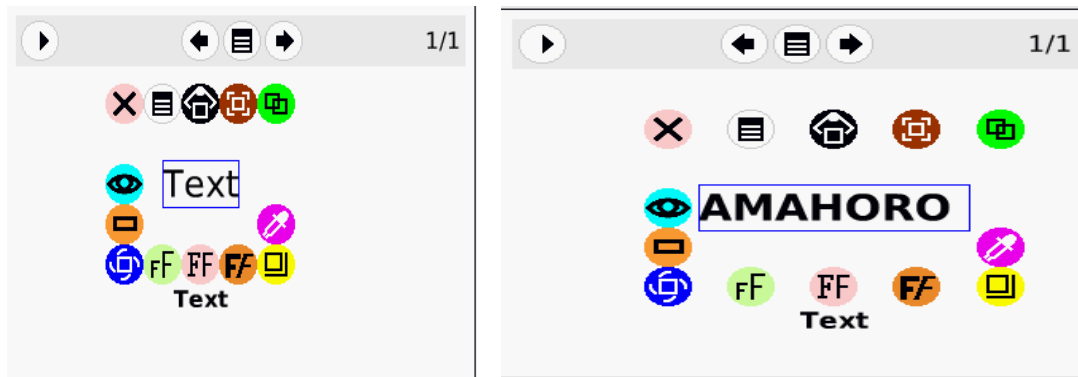
It is also very easy to add some text to the book. What we need to do is to open again our **SUPPLIES** box and look for the **TEXT** object.



Drag the **TEXT** over the book, and drop it. To start writing, just select the text and start typing.

To change the font or the size of your text. What we need to do is to call the halo, by right clicking the **TEXT**.


Resize the page of the book by using resize tool



Now you can add the pages on the book

Adding drawings to the Book

There are two ways of adding a drawing to the **BOOK**. If you already have a drawing outside the book, just drag it and drop over the book. The drawing will be automatically added to the current page. The second way

is to create a new drawing, by clicking the **PAINT** icon  on the top menu.



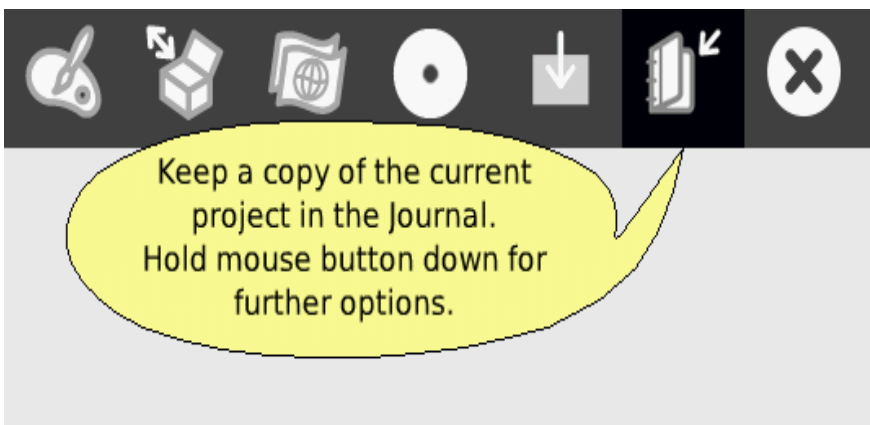
When you click on the paint palette in the toolbar, the painting tool will appear and part of the screen is covered with a transparent rectangle. This is your drawing sheet. If you want to draw several objects, exit the painting tool by clicking “keep”.

Painting a background

The **BOOK** is often used to create stories with animated characters. But in order to do animations in etoys, it is necessary to draw the scenario (**BACKGROUND**) separated from the characters (**OBJECTS**).



In the navigator tab, click on the “Publish” icon. A form will appear. Using the form, name the project.



After you click “ok” on the form, a new window will appear. Click once on “Etoys”



10.4 Practice

ACTIVITY.10. 1

Interactive art

Write these script to the sprite One

ACTIVITY10.2.

Animation

Air plane animation

Input Block Script to the Air Plane

The Output will look like this

ACTIVITY 10.3. CREATE A DIALOGUE

Suggested answer

Scripts to create a dialogue: Paul and Peace



Scripts for Paul

```
Scripts Costumes Sounds
when clicked
say Hello,Peace how are you? for 4 secs
broadcast 1
when I receive 2
say Do you know that 1 out of 6 boys with 15 years old are sexually abused! for 6 secs
wait 1 secs
say What about girls? for 2 secs
broadcast 3
when I receive 4
say The problem is that 75% of sexually abused children dont tell for 6 secs
broadcast 5
when I receive 6
say I believe you and I are going to help to say "stop children abuse" for 6 secs
broadcast 7
```

Scripts for Peace

```
Scripts Costumes Sounds
when I receive 1
say Hey Paul,I am fine thank you! for 4 secs
broadcast 2
when I receive 3
say 1 out of 4 girls with 12 years old are sexually abused! for 6 secs
wait 1 secs
say How many do you know? for 4 secs
broadcast 4
when I receive 5
say What can we do to stop child abuse? for 4 secs
broadcast 6
```


REFERENCES

1. <https://scratch.mit.edu/projects/463160707/>
2. <https://elearning.reb.rw/course/view.php?id=1223>
3. <https://elearning.reb.rw/course/view.php?id=1158>
4. <https://elearning.igte.reb.rw/>
5. <https://www.manualslib.com/manual/1440235/Intel-Education-Content-Access-Point.html>
6. https://en.wikipedia.org/wiki/OLPC_XO
7. <https://onedrive.live.com/view.aspx?resid=36408E1DE9093271!5477&ithint=file%2cdocx&authkey=!ADAZr8uDIENgch0>