

# Computer Basics for ABE Students

## What we will learn in Computer Basics

<b>Table of Contents</b>	
What is a computer?	2
What can I do with A computer?	2 - 3
The parts of a computer	3 - 6
What is WI fi or wireless?	7
How wireless works	8
<b>Practice 1:</b> How to use the mouse	8 - 11
<b>Practice 2:</b> Mouse practice	12
<b>Practice 3:</b> Parts of a computer & what they do	12
What are computer hardware and software?	13 - 16
Where is software on my computer?	14
How to turn the computer on	15
How to turn the computer off	15
Getting Onto the Internet	16
How to get on the internet on the computer?	16
<b>Practice 4:</b> First time on the computer	17
How to use the keyboard	17 - 18
How to use a software program	18
How to open a program	19
How to close a program	19
How to save changes in the program	20
<b>Practice 5:</b> Using the keyboard and a program	20- 21
How to organize information into files	21- 22
How to print a Microsoft Office 2007 or 2010 document	23
<b>Practice 6:</b> Open and print a document	23
How to use a removable storage device	24
More information	25

**Computer Basics for ABE Students uses examples and instructions for computers with the Windows operating system. Some steps will be different on Mac computers.**

## What is a computer?



A computer is an electronic machine that takes instructions, processes information at very fast speeds and shows the results.

Computers can be used to edit, save and display text, pictures, sounds and numbers.

They are sturdy machines that do not break easily.

Computers have many safety features to prevent damage. Most computer user mistakes can be undone or fixed easily.

## What can I do with a computer?

Most machines, such as a microwave, do one thing.

Computers can do all the things listed below, and much more.

- Share information with friends and family
- Stay informed and learn more about anything



- Learn new skills
- Make appointments and keep a calendar
- Help your children with school work
- Search for a job
- Track your expenses and finances
- Play games
- Create documents
- Buy and sell products
- Listen to music
- Watch videos, television shows and movies
- Find new friends who share your interests
- Edit and share photos and videos

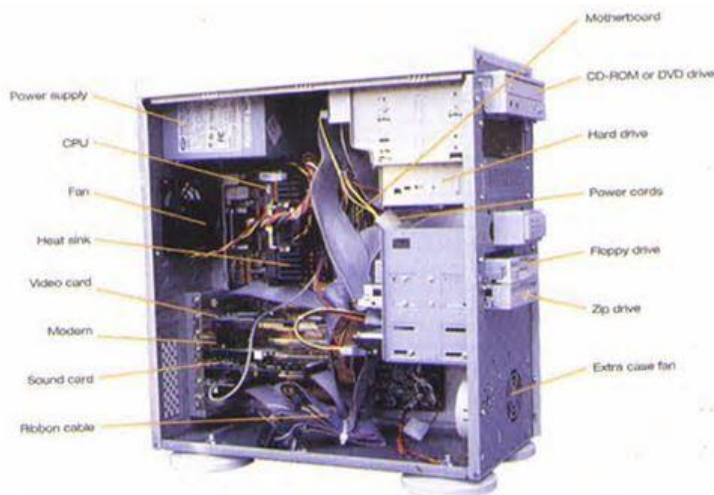
## Parts of a Computer

There are different types of computers, but all computers have these parts:



**Monitor:** Looks like a television screen and shows still or moving images in color.

It is also called a display.



**System Unit:** The computer case that holds all the electronic chips, memory storage areas and devices that make the computer work. It has openings or ports for other components to plug into.

It is also called the computer console, Central Processing Unit or CPU.



**Keyboard:** Used for typing text into your computer.

It also has special keys: number keys, arrow keys to move around the screen and function keys.



**Mouse:** A small tool for pointing and selecting items on the computer screen.

Some mice plug into the computer and some are wireless.



**Touchpad:** Laptops have a touch pad instead of a mouse.

A mouse can plug into the side of the laptop. See below.



**USB ports:** Rectangular holes for plugging in devices to the Computer, such as a mouse, printer or flash drive.



**Modem:** A device that allows the computer to receive information from the internet and other computers. It plugs into a cable or telephone jack.

**Speakers:** Built-in source for



sound or audio on your computer.

Look for the volume icon to adjust the sound settings.

A sound bar or external speakers can be added for better sound quality.



**Power supply:** Laptop Computers have a battery in their system unit plus an electrical cord to plug in a wall outlet.

It also charges the battery



**Battery:** This provides electricity when the computer cannot be plugged into an outlet. Batteries need to be changed every few years. The laptop has a battery pack and desktop has a battery cell. It is also called a Laptop Battery Pack



**Surge Protector:** Computers should be plugged into a power strip with a surge protector to prevent damage during a storm or other burst of electricity.



**Printer:** A device that prints text and images on paper from documents created on the computer.

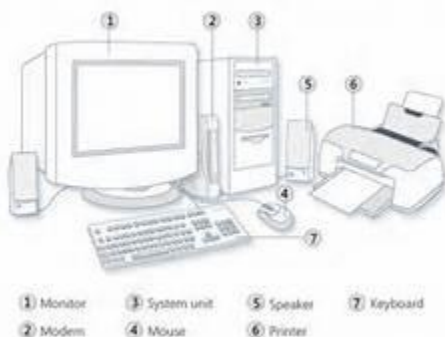
Printers may print in color or in black & white. Plug in or wireless style.



**CD/DVD drive:** Separate removable storage for playing and saving music, pictures and videos.

To burn CD or DVD, you need to buy R (Read Only) or RW (Read / Write).

## Basic Hardware for a desktop computer system.



1. Monitor
2. Modem
3. System Unit (CPU)
4. Mouse
5. Speakers
6. Printer
7. Keyboard

## Laptop Components





## What is or wireless? How do computers connect without wires?



WiFi



Wireless



Wi-Fi is a wireless technology that connects computers, mobile phones and other electronic devices over a wireless network.

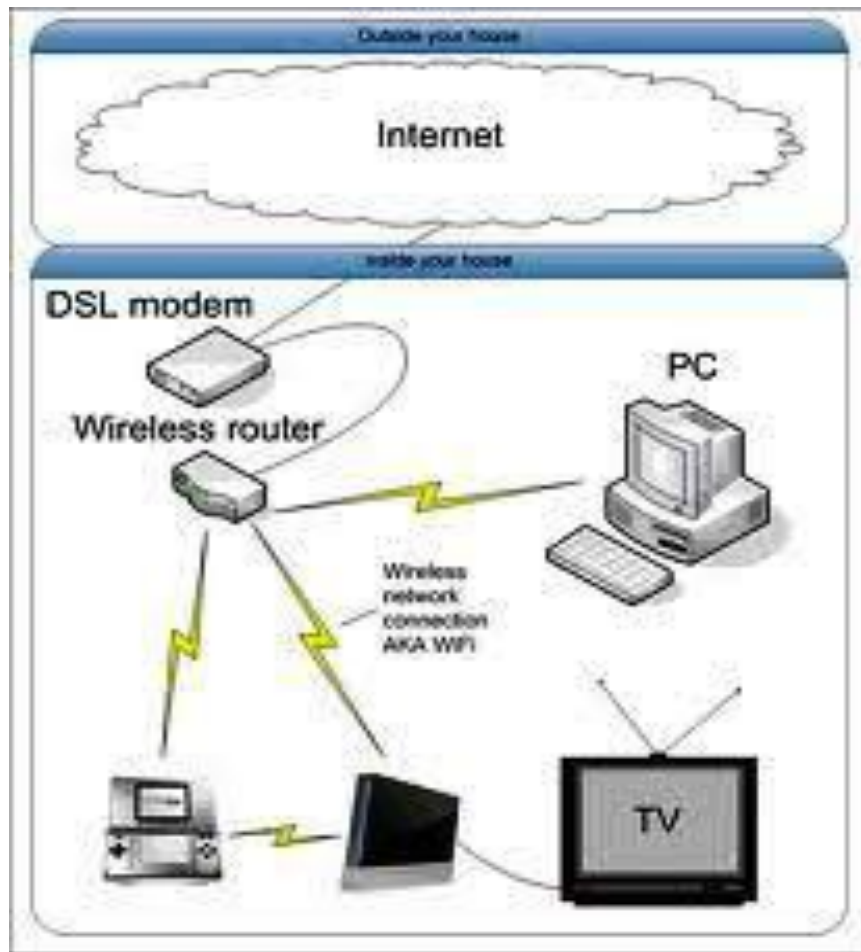
If you are at a library, restaurant or other public place and see a wireless symbol, you can connect to the internet with your portable computer.

You may need a password to use the facility's wireless.

**Router** The wireless router has 2 antennas that receive signals from the computers. The router needs to connect to a modem, but many computers can be served by 1 router.

***Is my wireless connection working?*** On the right side of the monitor (bottom for PCs and top for Macs) Click on this symbol A box will open and tell you if you are connected or not.

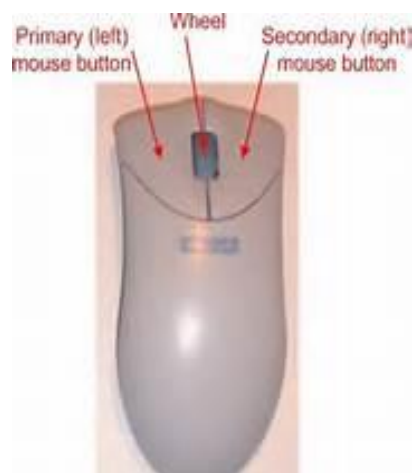
## How WI Fi Works



### Practice 1

### How to Use the Mouse

A MOUSE is a device that moves a pointer on the computer screen. It acts like a finger, allowing you to press buttons and select objects.



**Left Hand Button** - Use to point and select

**Scroll wheel** - Move page up and down on screen

**Right Hand Button** - To open menus, and commands

**Cord** - plugs mouse into the computer





## How to Hold the Mouse

Palm rests on mouse body

The Index finger rests on left button, and middle finger on right button

Wrist rests on table top

Other fingers grasp sides of mouse

Mouse rests on mouse pad or smooth surface

## Moving the Mouse

- # Keep the mouse flat on the surface -- it won't work in the air
- # Keep the mouse pointing forward in same direction
- # Hold the mouse and move it around slowly. Watch the computer screen and see how the pointer line moves as you move.
- # If you run out of room on the surface, pick the mouse up and put it back on the mouse pad
- # Keep your wrist straight and your eyes on the screen

## How to Click:

Lightly press and release the left mouse button with your index finger.

Try to keep the mouse still while you are clicking.

## When to Click:

You can click if you see a line I or blinking line on the screen.

Wait if you see the hourglass, the computer is thinking.

## Where to Click:



The white arrow is the pointer you'll see most often when you move and click the mouse. It points to objects on the screen.



Sometimes words can be clicked to move to another page. These words (called links) are underlined and appear in a different color than other text. [Click here](#). The pointer changes to a pointing hand when it is on an Internet Link.



Grabber pointer



I-beam pointer



Selection pointer

Point to text in a document on the screen and the I-beam appears. It shows where text will go if you start typing.



Click on Buttons to give an instruction to the computer.



Some pictures are links. If you point to a picture and the hand appears, you can click to move to another page .

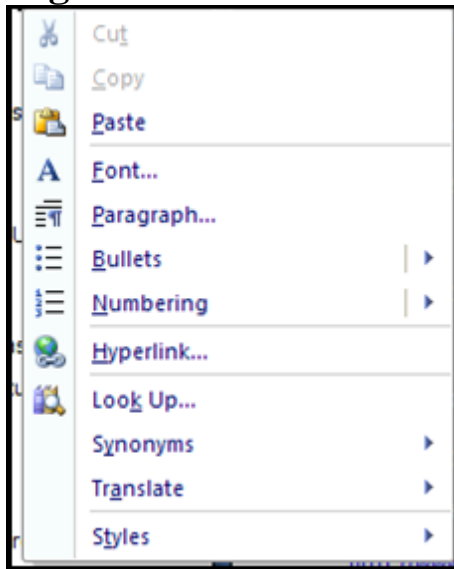
## How to Single Click

Move the pointer on top of the object and hold the mouse steady. Left click mouse once, gently.

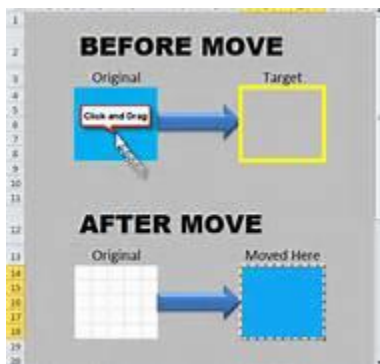
## How to Double Click

Move the pointer on top of object, hold mouse steady, and left click twice quickly.

## Right Click



## How to Click and Drag



## Using the Scroll Wheel

To open a menu like this and to give the computer more advanced instructions, use the Right mouse button and click once.

Different objects have different menus. If you need to do something and can't find it on the menu, try Right Clicking and see if it is there. Be sure to select the object first.

Use this to move objects around on the screen.

But now you have to move the mouse!

1) Move the pointer on top of the object to drag.

2) Left click and drag as you move the mouse.

3) Release the button when you're finished moving the object.

Rest your finger gently on the wheel

Move the wheel with your index finger, either toward you or away from you .

The page will move up or down on the screen

## Practice 2

[Mouse Aerobics](#)

[Mouse Exercises](#)

## Mouse Practice

Click on these website links for mouse practice.

## Practice 3

## Parts of a Computer and What They Do.

Match the word to its picture below. What does this part do?

**Keyboard**

**Mouse**

**Monitor**

**System unit or console**

**Printer**

**CD/DVD drive**



# What are Computer Hardware and Software?

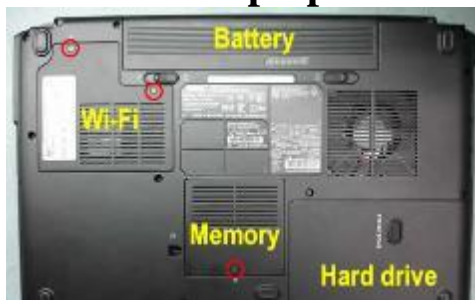
## Hardware Outside:

Includes the devices, buttons and parts on the outside of the computer that you can touch. EXAMPLES: monitor, keyboard, mouse

## Hardware Inside:

Includes the central processing unit, circuit boards, chips and objects inside the computer that store information and make it work. EXAMPLE: Hard Disk Drive or Memory

## Bottom of Laptop.



Shows where memory and hard drive are located inside of the case.

## Software:

Includes all the instructions or programs that make the computer hardware do their tasks, such as showing pictures on the display.

## System software:



The Operating System software controls the computer's startup, shutdown, document storage, the hardware devices attached and the application software.

Windows is the most popular operating system for PCs. OS X is the operating system for Mac computers.

Application/Programs software: These are programs you install or download on your computer to do a specific job.



With Microsoft Office software, you create documents, design a brochure, and do math and more. With iTunes you can listen to music, and buy music and videos to save on the computer. With Skype you can chat online with friends and family.

## Where is the software on my computer?



The System software and the programs software are stored safely in the memory or hard drive of your computer.

You cannot remove a program by one mistake. To remove or uninstall it, you have to give the computer several instructions and it will ask: Are you sure you want to delete?

When you turn on a PC computer, the logo for the Windows operating system will appear briefly on the monitor.



or

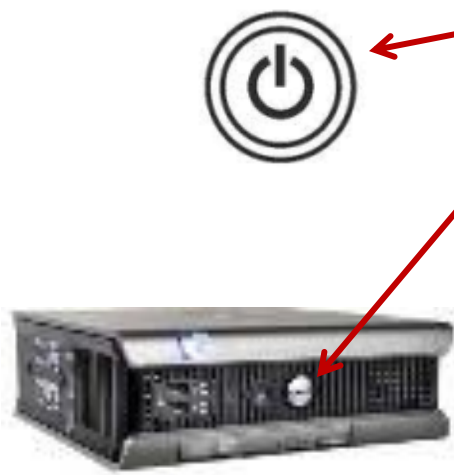


To find the programs, click Start button in lower left corner of display on Windows computer.

Click All Programs to see the list of Programs in the computer.



## How to turn on the Computer



### Power Button

- 1) Press the round power button on the computer system unit
- 2) Look for a glowing light around the button. - If no light, check that the power strip is turned on and plugged in. Check also that the power supply cord is plugged into the Computer.
- 3) If you have a desktop computer, push the power button on the monitor.
- 4) Turn the power switch on your printer.
- 5) The computer will make sounds and pictures will display for a minute or two.
- 6) The computer is ready to use when the hourglass icon disappears from the display screen and an arrow appears.

## How to turn off the Computer



You have to Click Start to turn off the computer

Click Log Off, if you want to close your work, but leave the computer on.

Click Shut Down, to turn the power off on the computer.

Click OK to shut the power off.

## Getting on the Internet



The internet is a huge worldwide network of computers sharing information. Millions of computers are connected by satellites, cables and by wireless connections.

The internet makes it easy to share information, do research, and connect with family and friends and to enjoy music and videos.

For Internet Access, you need a computer plus:

- 1) Free web browser software:  
Internet Explorer, Google Chrome, Safari, Mozilla Firefox OR Opera.
- 2) A device to access the internet: a modem, router or cable.
- 3) \$ for an Internet Service provider (cable or phone company)

## How do I get to the internet from the computer?



Look for the Browser icon on your screen or in All Programs.

Point with your mouse to the icon and left click 'Next'. You will see your home web page on the screen – you're on the internet.

## Practice 4



## First time on the computer

- 1) Check that all computer connections are plugged in.
- 2) Push the power button to turn the computer on.

**Note:** images you see on the screen as computer gets ready estimate how long it takes for computer startup to finish.



- 3) Look along bottom of screen to find the Volume Icon
- 4) Open “All Programs” and look at the list of programs on the computer. Is Microsoft Office on the list?
- 5) Do you recognize the names of any other programs?

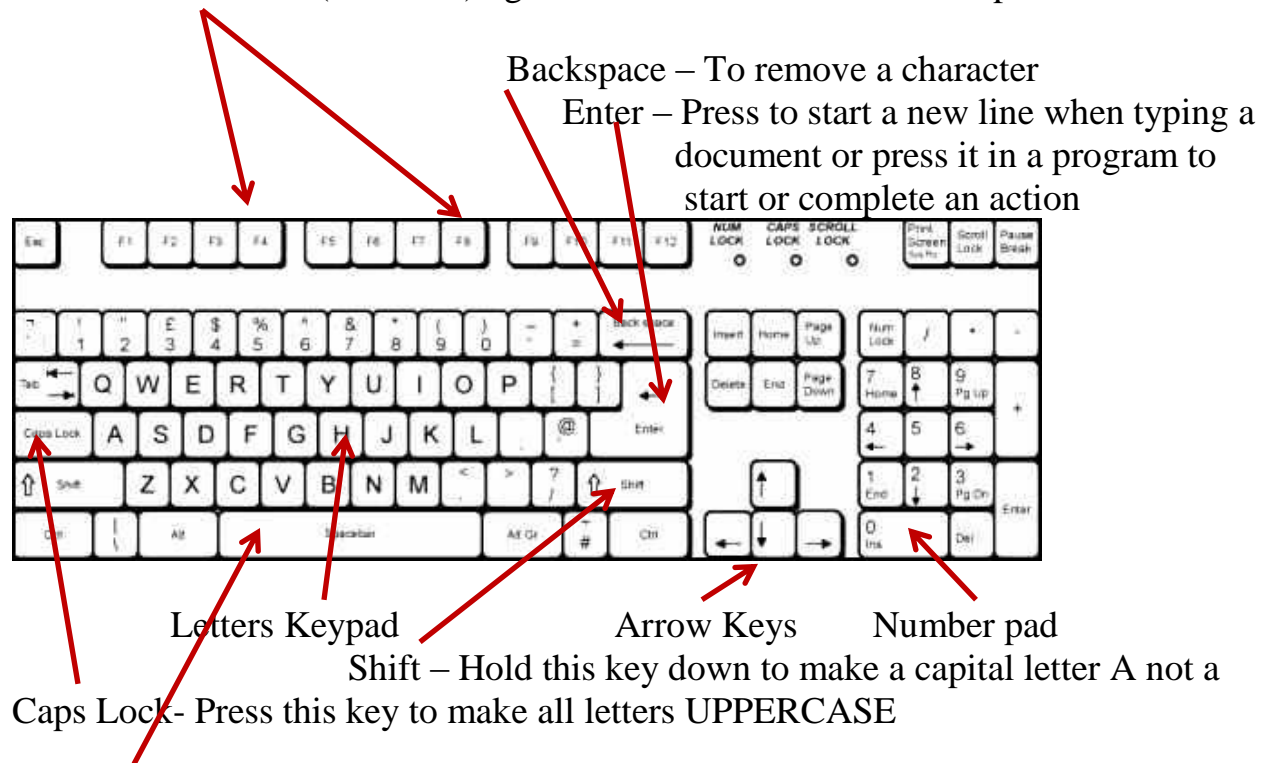
## How to Use the Keyboard



The keyboard is how you will communicate with the computer most often.

This is a typical keyboard: yours may look different

FUNCTION KEYS (F1 – F10) give shortcut instructions to computer



Space Bar – Press this to make a space between words

## How to Use a Software Program



Software is a computer program or instruction that tells your computer what to do to make it work for you.



Icons are pictures of some programs you may have on your computer;

If the program is not on your Start Menu, Open ALL PROGRAMS  
Left Click on the program name from the menu

## To Open a Program



or



Click on the Start Button or Globe on the lower left of the screen.



Point and left click on the picture. Then Double Click the Picture



Internet Explorer , Chrome, Safari or Firefox are called Browsers. Browser programs are used for internet access.

Word for word processing

Excel for numbers and spreadsheets

PowerPoint for presentations

Photosmart for photo editing

Quicken for money management



## To Close a Program

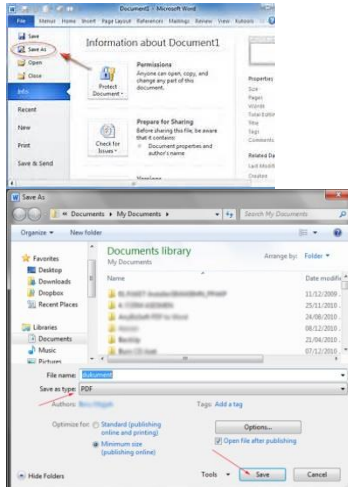


Click in top right corner of screen and click on the close button.

## How to save changes made using the program



Click Windows button in Top Left Corner



Select Save As and then

type a name in the Name Box

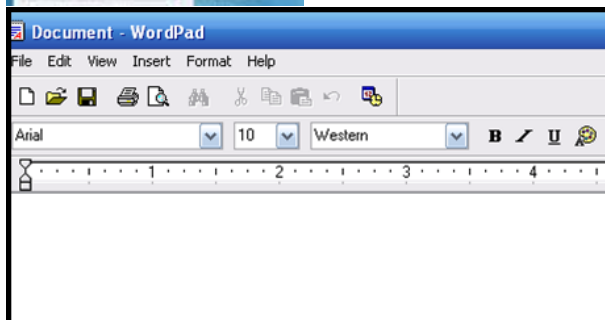
## Practice 5

Using the keyboard and a program we will type a few words and practice using the keyboard



Open the computer programs and pick a word processing program.

Look for WordPad (in Accessories) or Microsoft Office Word.



2) Click to open the program.  
You will see a blank white paper

3) Use the Keyboard to type your first name, press the Space Bar once,



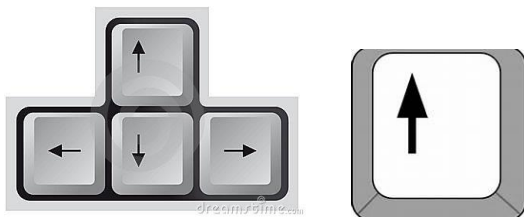
and last name

4) Hit the Enter key two times

5) Press the Shift key to type today's date (ex. Monday August 23) in Upper and Lower Case. Hit Enter

6) Press numbers on the Number Pad to type your phone number

7) If you make a mistake, use the Backspace key to erase and re-type a letter or number



8) Press the Up Arrow key to move pointer to top. Press Caps Lock and type MY NAME IS to the left of your name on top

9) Click File and Save As to save your document in "Library Files / Students /". Click or in top right corner to close the program.



## How to Organize Information into Files

Stored computer data is organized like a file cabinet with folders and files of information.

A FILE is any single item created with a program and saved to your computer.

Here are 4 files created by 4 different programs

A pdf document (Adobe Reader)



Advertising brochure (Publisher)

Text document (Word)

Monthly statistics table (Excel)

A FOLDER is a collection of files, organized by the user.



‘My Documents’ holds all the other folders with their files.

‘My Music’ and ‘My Pictures’ are folders inside of ‘My Documents’.

## How to Print a Document

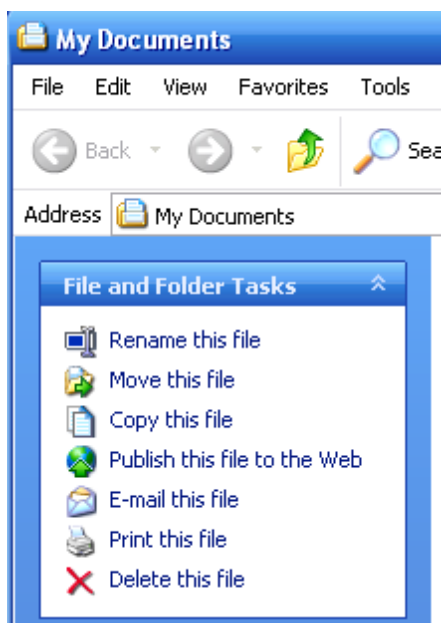
To get a paper copy of your file or document, you can print it, if your computer is attached to a printer.

1) Open ‘My Documents’ and click on the file you want to print.

2) Click Print this file

3) When the Print Box opens, Select the pages to print (or All ),

Number of copies and the printer

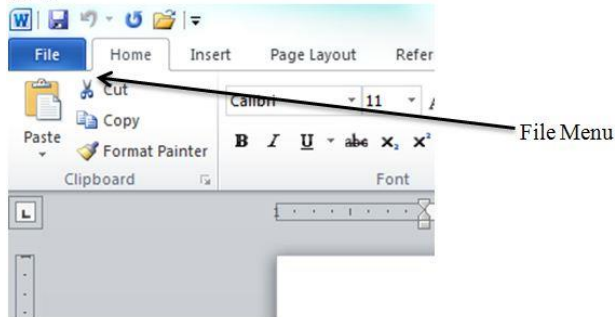


## How to Print a Microsoft Office 2007 or 2010 document

2007



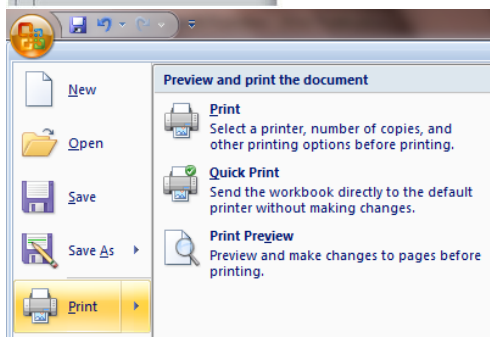
2010



1) Click on blue File Tab in top left corner.

2) Click Print from Left Menu and Print from Right Menu

3) Print Box opens, to select pages, copies and the printer.



## Practice 6

## Open and Print a Document

We will practice printing a one-page document from a link to it on the internet.

1) Click the link below to see an English Club document:

<http://iel.spokane.edu/LNB/Web-Lessons/Docs/ESLOnTheINTERNET.aspx>

2) Click the Print Button.

3) When Print Box opens, Preview the



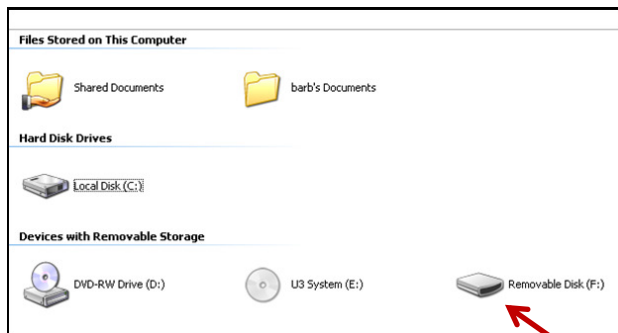
document and select 1copy

4) Click OK to send to the printer

## How to Use a Removable Storage Device



It is a good idea to save a copy of your files on a removable storage device such as a Flash Drive or thumb drive.



A Flash Drive plugs into a USB port on computer.

If you use a public computer at a library, you may have to bring a flash drive to save your documents

The Flash Drive is shown as Removable Disk Drive F for saving information

**IMPORTANT:** Click FILE then SAVE AS then Click Removable Disk to save information on the flash drive.

## For More Information

[Study From Home](#)

[Introduction-to-computers](#)

[Interactive Online Tutorial \(En & Sp\)](#)

Study ESL and Computers at home

Microsoft has online help and tutorials for new computer users

New to Computers (TLN Technology Committee) available in English and

Spanish

[Interactive Keyboard Tutorial](#)

Interactive Keyboard tutorial

Good luck and keep practicing