



Servol Chaguanas R.L.C

INTRODUCTION TO COMPUTERS

Computer Lab Notes



COMPUTER LITERACY INTRODUCTION TO COMPUTERS

A BASIC COMPUTER SYSTEM.

1. MONITOR
2. KEYBOARD
3. SYSTEM UNIT (TOWER)
4. MOUSE



ACTIONS ASSOCIATED WITH THE KEYBOARD



5. TYPING
6. PRESSING



ACTIONS ASSOCIATED WITH THE MOUSE



1. DRAGGING
2. POINTING
3. CLICKING
4. DOUBLE CLICKING



TURNING ON THE COMPUTER SYSTEM



1. Turn on the **SYSTEM UNIT**
2. Turn on the **MONITOR.**



SHUTTING DOWN THE COMPUTER SYSTEM



1. Close all programs (Click on File , Click on Exit)
2. Click on "Start"
3. Click on "Turn Off"
4. Turn of the **MONITOR.**

NB: The SYSTEM UNIT shuts off automatically.



COMPUTER LITERACY

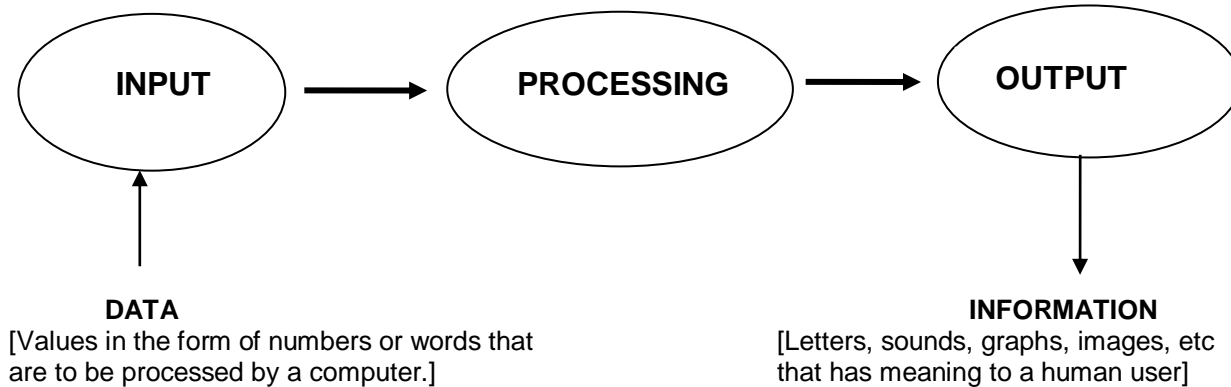
INTRODUCTION TO COMPUTERS

DEFINITION OF THE PERSONAL COMPUTER:

An Electro-mechanical device that can accept data, process the data according to your instructions and display results.

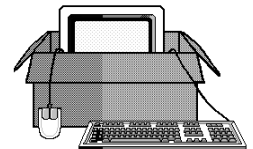
HOW DOES THE COMPUTER OPERATES?

The Computer operates on a concept of:



WHAT IS HARDWARE?

HARDWARE refers to the parts of your computer that you can see and touch. E.g. Mouse, Keyboard, Monitor, and all internal parts inside the system unit/tower.



WHAT ARE INPUT AND OUT PUT DEVICES?

INPUT DEVICES

Input devices allow the user to send data into the CPU. E.g.

- ❖ Mouse
- ❖ Keyboard
- ❖ Scanner
- ❖ Microphone

OUTPUT DEVICES

Output devices allow the user to receive information from the CPU. E.g.

- ❖ Monitor
- ❖ Printer
- ❖ Speaker




COMPUTER LITERACY INTRODUCTION TO COMPUTERS

PROCESSING DEVICES

- ❖ Central Processing Unit (The Microprocessor)
- ❖ Hard Drive

BASIC PARTS OF THE COMPUTER

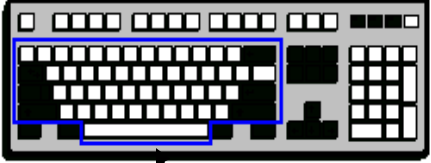
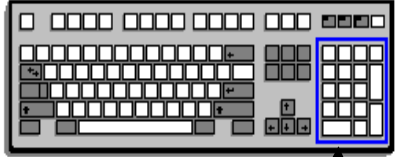
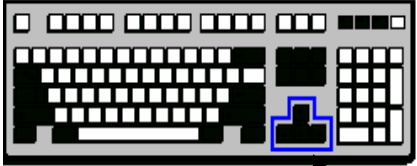
THE MONITOR

<p style="text-align: center;">M O N I T O R</p>	<div style="text-align: center;">  <p>Monitor</p> </div> <p>The Monitor is sometimes called a Display. It is like a TV screen. It is used to allow the user to view what is being inputted through the keyboard.</p> <p>The monitor functions as both an INPUT and an OUTPUT device.</p> <p><u>Types of Monitors:</u></p> <p>Cathode-Ray Tube [CRT] – This is a glass tube that is narrow at one end and opens to a flat screen at the other end.</p> <p>Liquid-Crystal Display – These are thinner than CRT monitors. Laptop or notebook computer use this type of display. .</p>
<p style="text-align: center;">Caring for Your Monitor</p>	<ul style="list-style-type: none"> ❖ Do not touch the glass surface of the screen. ❖ Do not play with the display controls [brightness, contrast, height, etc.] at the lower front of the monitor. ❖ Allow warm air to circulate through the vents at the top of the monitor. ❖ Do not put books or papers over these air vents. ❖ Do not place monitor in an enclosed area.



COMPUTER LITERACY INTRODUCTION TO COMPUTERS


THE KEYBOARD

K E Y B O A R D	<p style="text-align: center;"><u>TYPES OF KEYS FOUND ON THE KEYBOARD</u></p> <p style="text-align: center;">1. <u>Standard Typing Keys</u></p> <p>Your keyboard has standard typing keys: E.G. Letter Keys. Punctuation Keys, Space Bar and Format Keys (Shift, Tab, Caps Lock)</p> <p style="text-align: center;">2. <u>Numeric Keypad</u></p> <p>Make sure the NUM LOCK indicator light is on when using the Numeric Keypad.. You can also enter symbols for calculations. E.g. +, -, /, * (MULTIPLY)</p> <p style="text-align: center;">3. <u>Arrow Keys</u></p> <p>These keys allow you to move the cursor around on your screen.</p>	 <p style="text-align: center;">Standard Typing Keys</p>  <p style="text-align: center;">Numeric Keypad</p>  <p style="text-align: center;">Arrow Keys</p>
<u>Caring for Your Keyboard</u>	<ul style="list-style-type: none">❖ Keep all liquids away.❖ Keep small items away e.g. paper clips, staples and pins❖ Do not sharpen pencils over the keyboard❖ Press gently on the keys.	



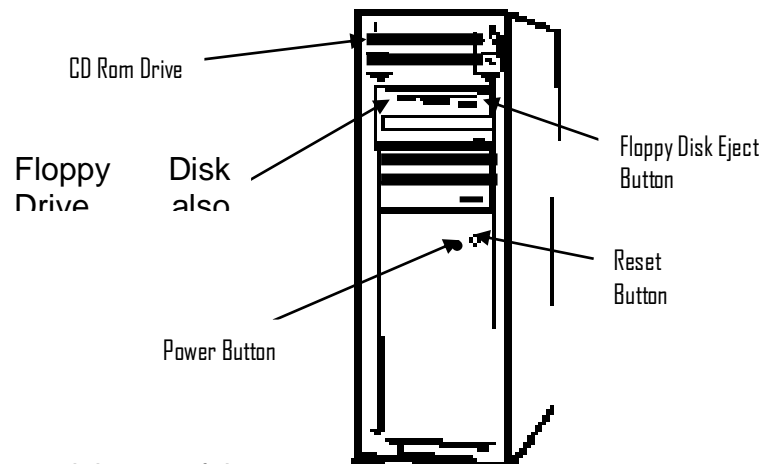
COMPUTER LITERACY INTRODUCTION TO COMPUTERS

THE MOUSE

M O U S E	<p>The Mouse is a pointing device that the user moves around on a surface</p> <p>The Mouse contains two (2) buttons and a Scroll wheel:</p> <p>Left-Mouse Button – this is the main command button.</p> <p>Right-Mouse Button – this is use for shortcut commands that vary according to the context of the item clicked.</p> <p>Scroll Wheel (or Button) – Located in the middle of your mouse buttons. This is used as a shortcut to the vertical scroll bars in your application.</p>	 <p>2-BUTTON MOUSE WITH SCROLL WHEEL</p>
C A R I N G F O R Y O U R M O U S E	<ul style="list-style-type: none"> ❖ Always move the mouse over the mouse pad, not on the desk or a book. ❖ Keep dust and eraser waste away from the mouse. 	

THE SYSTEM UNIT (TOWER)

HARD DISK - DRIVE C - CPU & POWER SUPPLY
Are All Located Inside Of
The System Unit



The **Tower** is the container for some essential parts of the computer:

- ❖ The hard disk drive
- ❖ Floppy disk drive
- ❖ CD-ROM/ DVD drive
- ❖ Power supply
- ❖ Motherboard
- ❖ CPU are all located inside of the Tower.



COMPUTER LITERACY

INTRODUCTION TO COMPUTERS

CARING FOR THE SYSTEM UNIT/TOWER

1. Always follow proper shut down procedure.
2. Keep the system unit/tower as cool as possible.
3. Do not kick or bump the system unit/tower whilst it running.

THE CENTRAL PROCESSING UNIT (C.P.U)

The most important part of every computer is the [central processing unit](#) (CPU, or simply a processor), because it actually operates on data, performs any calculations, and controls all the other components.

PROGRAM/SOFTWARE

An organized list of [instructions](#) that, when [executed](#), causes the [computer](#) to behave in a fixed manner. Without programs, computers are useless.

A program is like a recipe. It contains a list of ingredients (called [variables](#)) and a list of directions (called statements) that tell the computer what to do with the variables. The variables can represent numeric [data](#), [text](#), or graphical images.



HOW TO CARE FOR YOUR WORKSPACE

ABSOLUTELY NO:

- ❖ Eating
- ❖ Drinking
- ❖ Smoking
- ❖ Playing or Liming
- ❖ Unauthorized Persons

ALWAYS:

- ❖ Throw ALL Garbage away
- ❖ Always Keep desk neat and tidy





COMPUTER LITERACY INTRODUCTION TO COMPUTERS

WHAT ARE THE DISADVANTAGES AND ADVANTAGES TO USING COMPUTERS?

ADVANTAGES

1. Computer literacy is becoming a huge job qualification and will put you a step ahead.
2. Children will be able to complete homework faster and neater.
3. Information is process faster
4. Production is faster
5. Research & Information is easily available (Checking news, weather, and sports via the Internet.
6. Entertainment [music, movies, games] can be more readily available to individual consumers

DISADVANTAGES

1. Viruses.
2. Spam (when someone misuses a computer)
3. Hazardous to health if used for long periods
4. Loss of privacy (Hackers) when people hack into your or a system
5. Must have a reliable electrical power supply



INFORMATION STORAGE

There are various types of storage devices used by computer systems. These can be classified into two main types: **Primary & Secondary**.

▣ PRIMARY STORAGE

RAM
ROM

RAM

Random-access memory (RAM) is a form of [computer data storage](#). it takes the form of [integrated circuits](#) that allow stored [data](#) to be accessed in any order (**i.e., at random**).

The word RAM is often associated with [volatile](#) types of memory where the information is lost after the power is switched off.





COMPUTER LITERACY

INTRODUCTION TO COMPUTERS

ROM

Read Only Memory – ROM – , the data is physically encoded in the circuit [ROM chips] which are installed on the computer's motherboard. ROM chips hold their internal programs without the need for electric current from the system's power supply.

▣ SECONDARY STORAGE

Secondary storage (or **external memory**) differs from primary storage in that it is not directly accessible by the CPU. The computer usually uses its [input/output](#) channels to access secondary storage and transfers the desired data using [intermediate area](#) in primary storage.

- ❖ Floppy disks
- ❖ Hard disks
- ❖ Magnetic tape cartridges
- ❖ Magnetic tape reels
- ❖ Compact disks



PRINTERS

A printer is an electromechanical device used to transfer text and graphics from a computer onto paper.

Examples of printers include:

❖ DOT MATRIX

Lowest quality output. Quite noisy. Used to be the most popular type of printer, but now only used as a heavy-duty printer where low quality output is acceptable. Usually only black and white output.

❖ INK JET

Good quality output. Produces very little noise. Can produce black and white or coloured text and graphics.

❖ LASER

Excellent quality output. Extremely quiet operation. Expensive models can produce very high quality coloured text and graphics.