

COMPUTER HARDWARE AND SOFTWARE STUDY GUIDE

BASIC TERMS

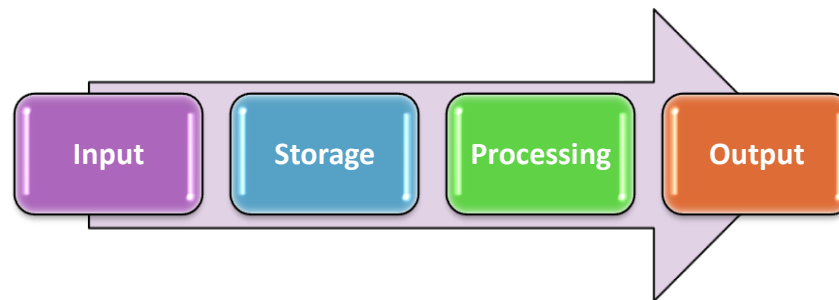
Software – A set of instructions that tell the computer what to do.

Hardware – Components of the computer that you can physically touch.

Operating System Software – Software that helps a computer control itself to operate efficiently and keep track of data. Examples: Windows and Macintosh OS

Application Software – Software that allow people to do specific things on the computer. Examples: Microsoft Office, Adobe Photoshop

FOUR STEP COMPUTER PROCESS



Step 1: Input

During step 1, Input, the computer gets information from the user.

Input devices used at this step are: Keyboard, Microphone, Mouse, Scanner, and Digital Camera

The arrow you see when you move the mouse is called the pointer.

Moving objects across the screen is called dragging.

Clicking – select

Double-clicking - Open

A scanner allows you to convert printed images into computer graphics.

Step 2: Storage

During step 2, Storage, the computer stores data.

Storage devices are: the hard disk drive (main storage device in most computers), CD, DVD (Digital Versatile Disk), zip or floppy disks, flash drives, portable hard drives.

The Hard Disk Drive is the permanent storage device inside the computer. This storage device contains rotating disks where data is stored magnetically.

CDs

- CD-ROM – Compact Disk Read-Only
- CD-R – Compact Disk Recordable – You can save the information one time but read them over and over
- CD-RW – Compact Disk Rewritable – You can save information over and over.
- All CDs allow you to save information to read later.

Step 3: Processing

During step 3, Processing, the computer follows the instructions given by the user.

Processing device is the CPU – Central Processing Unit also referred to as a microprocessor or chip. This is the brain of the computer.

Two types of Memory

RAM – Random Access Memory is temporary memory.

ROM – Read-Only Memory is permanent memory.

Memory Size

Byte – One character in a computer's electronic memory

Kilobyte - 1,024 characters

Megabyte – 1,048,567 characters

Gigabyte – 1,073,741,824 characters

Step 4: Output

During step 4, Output, the computer gives information to the user.

Output devices are: Monitor (Display device), Printer, Sound board, speakers.

Monitor screen size is measured diagonally.

Printers

An inkjet printer has a nozzle-like head that sprays ink onto the paper.

A bubble jet printer uses heat to create a bubble of ink that is sprayed onto the paper.

A laser printer uses a beam of light to create an image on the paper

Modem – Modulator Demodulator allows computers to communicate with each other. It is considered an input and an output device.