

Computer Parts Basics

What makes up my computer?

Motherboard - the main circuit board that runs your computer (for example: it is like a highway with roads to follow). It contains all sorts of electronic parts and directs power and data with the help of the CPU and guides it to where it needs to go.

Bios Chip - Each motherboard, inside of each computer, has on it a Bios Chip. This is a small electronic device that a small program is written on. The chip is powered by a battery that sits on the motherboard. The program called CMOS tells the computer what parts are inside of it and which ones to talk to first. It contains the date, the time, and just basic information: hard drive type, capacity, type of memory, amount of memory, type of cpu, etc...

CPU - (central processing unit) a small chip that attaches to the motherboard that is the "brain" of the computer. This chip runs everything. The CPU gets very hot so it needs a small fan attached to the top of it.

Memory Chips - small chips that attach to the motherboard that is the computer's memory. It shuffles information in and out and remembers. Different computers take different types of memory. Be sure to add or replace memory using the exact same type.

Hard drive (HDD) - a small square shaped device that uses magnetic particles to store data. All information that you save on your computer is stored on the hard drive (Drive C). The magnetic particles can be saved or erased off the disk. The hard drive gets a power cable attached to it and also a hard drive cable (HDD cable). The hard drive cable is a wide (wider than floppy drive cable) and resembles a ribbon. It is made up of several small wires inside). *All cables in a computer have a color stripe down one side. This color stripe signifies Pin 1. This means that Pin 1 on a cable must match up with Pin 1 on the motherboard. Plugging a cable in backwards could damage computer components.*

Video card - It is an electronic circuit board which plugs into the motherboard which supplies video capability to the computer. Newer motherboards now have video cards or chip built in to them.

Sound card - It is an electronic circuit board which plugs into the motherboard which supplies sound capability to the computer. Newer motherboards now have sound cards or sound chip built in to them.

Power Supply - supplies current to the computer

1.44" Floppy Drive (FDD) (Drive A) - this is a small box shaped device that fits into the case of the computer. It gets a small power cable attached to it and also a floppy drive data cable. A floppy drive cable is a flat and wide ribbon type cable which is made up of various thin wires inside). The floppy drive cable (FDD cable) (which has a twist in it) attaches to the floppy drive (the end above the twist) and the other end attaches to the motherboard (small metal pins on the motherboard will be marked FDD - for floppy drive).

CD Rom Drive - this is a box shaped device that fits into the case of the computer. It is an optical device - which means it uses a laser to record information. It holds 780 megabytes of information. It gets a power cable attached to it and also a hard drive cable (HDD cable). The hard drive cable is a wide (wider than floppy drive cable) and resembles a ribbon. It is made up of several small wires inside). *All cables in a computer have a color stripe down one side. This color stripe signifies Pin 1. This means that Pin 1 on a cable must match up with Pin 1 on the motherboard. Plugging a cable in backwards could damage computer components. A CD ROM drive will only play CDs, not DVDs.*

DVD Rom Drive - this is a box shaped device that fits into the case of the computer. It is an optical device - which means it uses a laser to record information. It holds 4.7 gigabytes of information. It gets a power cable attached to it and also a hard drive cable (HDD cable). The hard drive cable is a wide (wider than floppy drive cable) and resembles a ribbon. It is made up of several small wires inside). *All cables in a computer have a color stripe down one side. This color stripe signifies Pin 1. This means that Pin 1 on a cable must match up with Pin 1 on the motherboard. Plugging a cable in backwards could damage computer components.*

A DVD Player will only play DVD's and CD's, but not record. A recorder plays and records DVDs and CDs.

Things that a Computer Stores Information on

1.44" Floppy Disk - this is a small square plastic case. Inside is a small disk. If you save information on your computer to Drive A - the information will be written to a floppy disk. The disk is written by arranging or rearranging magnetic particles. Data can be written or erased on a floppy disk. Each disk holds 1.44 megabytes of information. Floppy disk can be removed from the computer's floppy drive and stored elsewhere.

CD ROM (compact disc read only memory) - is a flat, plastic disc with digital information recorded on it using laser technology. It is written on it in a spiral direction from the center to the outside edge

DVD ROM - The newest video CD and high-capacity CD-ROM; the same physical size as the CD-ROM. Each side holds 4.7GB, equivalent to seven CD-ROMs.

Hard drive (HDD) - Hard drives are mounted inside the computer case. They are a small square shaped device made of metal, inside is a small metal arm that rides across a disk that uses magnetic particles to write data to the disk. All information that you save on your computer is stored on the hard drive (Drive C).