



# CAPACITARTE

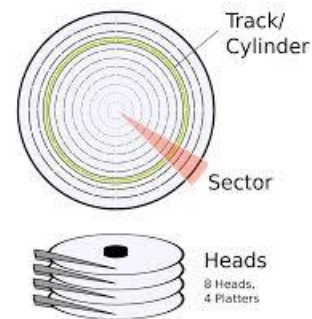
*Es ser líder de tu vida*



## Disk and drives

### a- Magnetic storage

- Magnetic devices store data magnetically. A disk drive spins the disk at high speed and reads its data or writes new data onto it.
- A **floppy disk** drive uses 3,5 inch diskettes which can only hold 1,44 MB of data; it's often called A: drive and is relatively slow.
- Most PCs have some internal **hard disk**, usually called C: drive, which can several gigabytes of data. It is used to keep the operating system, the programs and the user's files easily available for use.
- When you format a disk, or prepare it for use, its surface is divided into concentric circles called **tracks**. Each track is further divided into a number of **sectors**. The computer remembers where information is stored by noting the track and sector numbers in a directory.



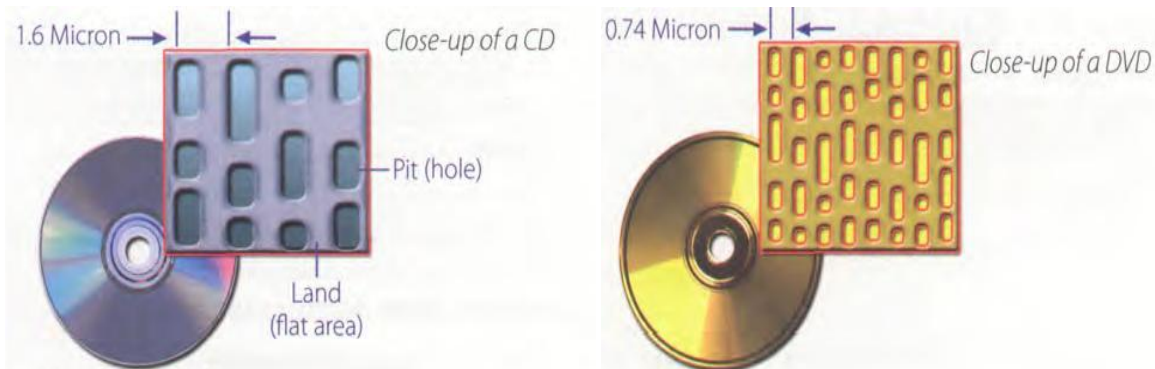
The average time required for the read/write heads to move and data is called **access time**; it is measured in milliseconds (ms). Don't confuse access time with **transfer rate**, the rate of transmission of data from the disk to the CPU (e.g. 15 megabytes per second). A **portable hard drive** is an external unit with the drive mechanism and the media all in one sealed case. You can use it to make a backup, a spare copy of your files, or to transport data between computers.

### b- Optical Storage

Optical drives use a laser to read and write data, so they are not affected by magnetic fields; but they are slower than hard drives. Modern DVD recorders accept all CD and DVD formats.

At first sight, a DVD is similar to a CD. Both discs are 120 mm in diameter and 1.2 mm thick. They also both use a laser beam to read data. However, they are very different in internal structure and data capacity.

In a **DVD**, the **tracks** are very close together, thus allowing more tracks. The **pits** in which data is stored are also smaller, so there are more pits per track. As a result, a **CD** can hold 650-700 MB, whereas a basic DVD can hold 4,7 GB. In addition, a DVD can be double-sided and dual layer, with a capacity of 17 GB.



### c- HD-DVD and Blu-ray discs

These two competing formats are expected to replace current DVD as the standard for watching movies at home. On one side are Toshiba, Microsoft and the DVD forum, who support the **High Definition- DVD (HD-DVD)**. Sony, Panasonic, Samsung, JVC and many movie studios are behind the Blu-ray format.

A **Blu-ray disc** has a capacity of 25 GB (single layer), 50 GB (dual layer) and 100 GB (four layer). Unlike DVDs, which use a red laser to read and write data, Blu-ray uses a blue-violet laser, hence its name. Blu-ray discs can record and play back high-definition television and digital audio, as well as computer data.



**Portable DVD Players** let you watch movies or TV, play games and listen to music, wherever you are. They usually run on batteries, have a widescreen LCD and support

**multi-format playback**, allowing you access to many file formats including DVD video, JPEG pictures, MP3 music, etc. They have two built-in stereo speakers, or headphones if you don't want to disturb other people.

#### d- Removable Flash Memory

It is solid-state, rewritable memory; it is non-volatile, so it retains data when the power is turned off. this explains its popularity in small devices.

**Flash Memory Cards** are found in cameras, PDAs and music players.

**Flash drives**, known as thumb or pen drives, are connected to a USB port of the computer. They let you save and transfer data easily.

#### Precautions

We use the <b>imperative</b> to give precautions and warnings	We use <b>should</b> + infinitive without TO to give advice or to talk about what we think is right.	We use <b>shouldn't</b> + infinitive without TO to give advice or to talk about what we think is wrong.
<p><b>Check</b> your hard drive regularly for logical and physical errors.</p> <p>Formatting erases any existing files on a disk, so <b>do not format</b> disks on which data that you don't want to lose is stored.</p>	<p>You <b>should</b> install an up-to-date virus scanner</p>	<p>You <b>shouldn't</b> turn your computer off and on quickly.</p>

## Classifying from general to specific

Classifying means putting things into groups or classes. We can classify types of music, parts of a computer, classes of software, etc.

### Typical Expressions

are <b>classified</b> // can be <b>divided INTO</b> X <b>categories/types</b>	...include// ... consists <b>of</b> // ... is made up <b>of</b> // ... is composed <b>of</b> // ... comprise	There are X types / classes / categories <b>OF</b>
<i>Storage media are often <b>classified into</b> three categories: magnetic, optical and flash memory</i>	<i>A hard disk <b>consists of</b> several disks (platters) and their read-write heads. Optal storage media <b>comprise</b> CDs, DVDs and high-definition video discs, which <b>include</b> two competing formats: HD-DVD and Blu-ray.</i>	<i>There are two basic <b>types of</b> flash memory: flash memory cards and USB flash drives.</i>

### Choosing storage devices

We can use the following expressions to give advice on choosing storage devices

- For this use, the ... is the most appropriate **because** (reason)...
- The .... has .... **so** I'd choose it **for** (reason)
- **However**, .... is good for .... **because** (reason)
- In a big/small company, it would be a good idea to ....
- Well, that depends on ....
- I agree/I disagree.

In addition to the use of connectors in bold above, we also use connectors for the following purposes:

<b>Indicating addition</b>	<b>Making contrast</b>	<b>Explaining result or effect</b>
futhermore, in addition, besides, moreover, and	however, although, whereas, but, on the other hand	therefore, so, as a result, consequently, thus, because

