CAPACITARTE

Es ser líder de tu vida

Computer Essentials

LCD MONITORS

LAPTOPS

COMPLETE SYSTEM

KEYBOARDS & MOUSE

SPEAKER SYSTEMS

PC HEAD SETS

WIRELESS ROUTERS

GRAPHIC AND SOUND CARDS

WEB CAMERAS

UPS & SURGE PROTECTORS

EXTERNAL & INTERNAL HARD DRIVES

MOTHERBOARD & PROCESSORS

MEMORIES

DVD/CD –RW

INK JET, LASER, MULTI FUNCTION PRINTERS AND SCANNERS

A computer is an electronic machine that accepts, processes, stores and outputs information. A typical computer consists of two parts: hardware and software.

Hardware	Software
is any electronic or mechanical part of the computer system that you can see or touch.	is a set of instructions, called a program, which tells a computer what to do.

There are three basic hardware sections:

1. The CPU is the heart of the computer, a microprocessor chip which processes data and coordinates the activities of all the other units.
2. The main memory holds the instructions and data which are being processed by the CPU. It has two main sections: RAM (random access memory) and ROM (read only memory)
3. Peripherals are the physical units attached to the computer. they include:
   - Input devices
   - Output devices
   - Storage devices

At the back of a computer there are ports into which we can plug external devices (scanners, modems). They allow communication between the computer and the devices.

Functions of the PC

Input	Processing	Storage	Output
entering of data with a keyboard, a webcam	manipulation of data according to program instructions	keeping data and programs in memory systems where they are available for processing	results shown on the screen or in printed form.

From Mainframes to wearable computers

- A **mainframe** is the most powerful type of computer. It can process and store large amounts of data. It supports multiple users at the same time and can support more simultaneous processes than a PC. The central system is a large server connected to hundreds of terminals over a network. Mainframes are used for large-scale computing purposes in banks, big companies and universities.
- A **desktop PC** has its own processing unit (or CPU), monitor and keyboard. It is used as a personal computer in the home or as a workstation for group work. Typical examples are the IBM PC and the Apple Macintosh. It is designed to be placed on your desk. Some models have a vertical case called **a tower**
- A **laptop**, also called a notebook PC, is a lightweight computer that you can transport easily. It can work as fast as a desktop PC, with similar processors, memory capacity and disk drivers, but it is **portable** and has a smaller screen.
- Modern **netbooks** have **a TFT** (Thin Film Transistor) screen that produces sharp images. Instead of a mouse, they have a **touchpad** built into the keyboard – a sensitive pad that you can touch to move the pointer on the screen. They come with **battery packs**, which let you use them when there are no **electrical outlets** available.
- A **table PC** looks like a book, with an LCD screen on which you can write. You can **fold** and **rotate** the screen 180 degrees. You can also type at the **detached keyboard** or use voice recognition. It's mobile and **versatile.**
- A personal digital assistant or **PDA** is a tiny computer which can be held in one hand. The term PDA refers to a wide variety of hand-held devices, palmtops and pocket PCs. For input, you at a small keyboard or use a stylus (a special pen used with a touch screen to select items, draw pictures. Some models incorporate handwriting recognition, which enables a PDA to recognize characters written by hand or voice recognition software to recognize spoken words.

At a computer shop

Customers need expert advice when buying a new computer. They may have questions such as What to look for in a computer? How much do I need to spend? Where should I start?

- o The first question customer should ask is what they will use the computer for. Then, they can decide what system will fit their needs by considering the following factors:
- o The quality they need and the price they are willing to pay. There are low-end, mid-range or high-end computers.
- o Three basic features make a big difference: the CPU speed, the amount of RAM and the Size of the hard drive. To run highly demanding applications, a fast processor, plentiful RAM and a spacious disk are necessary.
- o If customers already have peripherals and software, they will have to ensure they are compatible and can be used with the new computer.
- o If you want to use the system for some time, it should be expandable, i.e. it should allow you to add on new peripherals.
- o Most standard computers offer integrated, built-in, sound cards. If you're keen on music, you should also buy separate, external speakers.
- o Finally, customers have to make sure the system you buy is reliable, i.e. it's not likely to go wrong. They need to check that they will receive a warranty and good technical support.

Comparing qualities

Comparing and finding differences or similarities are common functions in ICT. When you want to buy a new device, or you read articles about the latest computer or mobile phone, or need to make a decision about the most suitable ICT system for you, you may have to use and understand expressions like the followings:

Comparison	Contrast
• A flat panel monitor is **slimmer than** a CRT. • A PDA is **more manageable than** a laptop • Laser printers offer **higher** quality **than** ink-jet models but ink.jet printers cost less money. • You can type **more easily** with a separate keyboard. • Free programs are **as good as** proprietary ones. • A broadband line is **the best** option to download multimedia • **The more** memory you have, **the faster** you'll be able to load your files. (Parallel comparatives)	• **While** a dial-up connection is usually cheap, it is very slow. • A scanner can be useful **but** it isn't an essential peripheral. • **Unlike** CRT monitors, TFT ones are light. • *Similarity* • **Both** brand name and clone computers have **similar** features. • Online shops **as well as** local retailers offer good value hardware.

Language functions useful to a sales assistant

- *Greeting and offering help*
  Good morning, Do you need any help?
- *Giving technical specifications*
  The MacBook has a processor running ar 2.0 gigahertz.
  The iMac has two gigabytes of RAM
  They feature a camera built into the display.
- *Describing*
  Both computers are very fast and reliable
- *Comparing*
  The MacBook is more practical if you travel a lot
  PDAs are cheaper than laptops but laptops are more powerful

Language functions useful to a computer

- *Explaining what you are looking for*
  We´re looking for a personal computer. Have you got any fairly basic ones?
- *Asking for technical specifications*
  What´s the storage capacity of the hard drive? Do they have a DVD drive?
- Asking the price
  How much do they cost?
  How much is it?