# Computer Buying Tips

Get the information you need to be a savvy consumer when shopping for your first or next computer.  This handout provides an overview of the types of computers available, and details the important technical specifications you need to know.

## Overview: What types of computers are available?

### Desktops

A desktop computer is a personal computer (PC) that has a form factor designed for regular use at a single location.  A desktop usually includes a separate monitor, case (CPU), keyboard and mouse.



Pros:  Least expensive option, best performance for the price, easy to upgrade, large screen size
Cons: Not portable

### Laptops

Laptop computers, or notebooks, are personal computers designed for mobile use.  They have an internal battery, and combine all parts into one unit.



Pros:  Highly portable
Cons: More expensive, smaller screen size

### Netbooks

Netbooks are a type of laptop computer that is more compact, lighter, cheaper, and have a smaller screen.  The drawbacks include weaker performance and the aforementioned small screen, and they do not have a built-in CD/DVD drive.

## ● Tablets

Tablets have recently gained popularity after the introduction of the Apple iPad; today there are dozens of tablets available from a variety of manufacturers.

Pros:  Most portable, great for Web, listening to
music and watching short videos
Cons:  Small screen size, no built-in keyboard,
weak performance, limited productivity

Generally, tablets complement desktops/laptops but do not replace them.  If you're buying just one computer, do not buy a tablet.


## How to Read the Technical Specifications

In a store, this information is located on or by the price tag of the computer.  Online, the specifications are part of the description on the webpage.  The specifications you should pay attention to are:

● **Processor (CPU)** – the **C**entral **P**rocessing **U**nit, or CPU, is the brain of the computer.  The main manufacturers are Intel and AMD.  Each produces a wide range of processors.

● **Memory (RAM)** – RAM (**R**andom **A**ccess **M**emory) is the computer's workspace.  As the computer starts up, the operating system loads into memory.  When you open a program or file, the appropriate file or files are copied to memory.  When the computer is turned off, all content in memory is erased.

● **Storage (Hard Disk Drive)** – this is where the operating system and all the programs and files reside.  It is your digital filing cabinet.  When you install a program or save a file, that data is put into the hard drive.  The larger the capacity, the more programs and files it is able to store.

- **Optical Drive (DVD, Blu-ray, no drive)** – If you plan on watching DVD or Blu-ray discs on your computer, or if you need to copy files to a CD or DVD, or play games, then an optical drive is an essential component.



Note: Thin and light laptops, netbooks, and tablets often do not have a built-in optical drive, but you may purchase an external drive.

- **Display (Screen / Monitor)** – the display is what you see.  A large, high quality display is easier on the eyes.  The quality, including brightness and resolution, may vary greatly from one computer to the next.  The size of the display (inches, measured diagonally) also varies greatly.



Laptops, netbooks and tablets have their displays built-in.  Desktops may include the monitor, or you may have to purchase it separately.

- **Graphics (Video Card)** – The video card is responsible for everything you see on your screen.  Most current laptops and computers are capable of playing HD quality video (720p or higher) without any issues.

There are two choices when it comes to graphics: integrated graphics and discrete graphics.

  - Integrated graphics have the video card built into either the CPU or the motherboard (where everything is plugged into).
  - Discrete graphics mean there is a separate video card.  Discrete graphics are almost always more powerful, and mandatory if you plan to play graphics-intensive games.

- **Connectivity (Wi-Fi, HDMI, SD card, etc.)** – Laptops, netbooks, and tablets all have Wi-Fi (wireless fidelity) capability; many also have Bluetooth.  Desktops generally do not have either.  Also, if you plan to show video from your computer on a TV, then an HDMI port is essential.

- **Size (Dimensions and Weight)** – If you do not plan to take the computer outside your home, then choose a bigger screen.  If portability is a concern, there are many thin and light laptops (under 4 lbs.), netbooks and tablets available**.**



Desktop          Laptop          Netbook      Tablet

**Step One: Determine what you want to do today and down the road.**

First decide if you truly need a new, or first, computer.  Will you take the time to learn to use it properly?

If the answer is yes, then reflect on what you plan to use the computer for today, but also consider your needs two years down the road.  Your list of needs may include:



- Browse the Web
- Shop online
- Email friends & family and/or colleagues
- Create documents (i.e., letters, resumes, flyers, etc.)
- Watch movies or listen to music
- Edit digital images or video (or music)
- Play games

Of course, it would be ideal to get the most powerful computer available, but the reality is that you have to…

**Step Two: Set your budget (and don't forget the accessories!)**

Computers are expensive.  Accessories such as printers or scanners will add to the total cost.  The good news is that a new computer is within the budget of most people.

What is a reasonable budget for you?  That is up to you to determine.  Don't spend more than you can afford.  Shop around and create a short list of computers that meet your needs and budget.

Note: If a computer is not in your budget today, there are places you can go to use a computer for free (or by paying a small fee), such as your local library!

**Step Three: Shop Around (in stores and online)**

As with most items, **it pays to shop around**.  It also pays to be patient.  The best advice is, "get what you need when you need it."

Places where you may consider buying from:

- Electronics / Big Box store
- Department / Office Supply store
- Online retailer
- Manufacturer (online)

**Dos and Don'ts when shopping for a computer.**

- **DO** take your time and wait for sales.

- **DO** set a budget and **DON'T** go over it!

- **DO** spend some time using the computer you intend to purchase.  Electronics stores have a variety floor models for you to test drive.

- **DO** read the reviews of computers in Consumer Reports, available at the Library!

- **DON'T** take the salespersons' word!  While many know what they're talking about and may be genuinely concerned in finding a good fit for you, others may either not be knowledgeable or may just be interested in making a sale.

- **DON'T** buy a computer just to try it out.  Most retailers charge a restocking fee for returned electronics that have been opened.


**More Computer Shopping Tips from ConsumerReports.org:**

- **Shop smart**
  Shop at an online retailer.  Our subscriber surveys have found them generally superior to walk-in stores for selection and price.  You can also save money by using coupon and forum sites such as Techbargains, FatWallet.com, and Ebates, which tend to provide information on rebates.

- **Or buy a la carte**
  If you have special needs, order from the manufacturer's website.  Menus show you all the options and let you see how a change affects the overall price. Configure-to-order will often give you choices you won't get if you buy an off-the-shelf model.  But be sure to double-check your choices before ordering, and look for unwanted items some manufacturers include by default.

- **Shop at the right time**
  January, July, and October are good times to shop; new models show up in stores at those times, meaning older inventory must be cleared out to make room.  If a computer you like isn't on sale, ask for a better price.

  Apple usually offers free iPods and educational discounts to students buying computers during the back-to-school season.  Macs aren't discounted that often, so take advantage of the price cuts that usually occur around the time Apple announces new models.

  That's when other retailers, such as Amazon.com, MacConnection, and MacMall, tend to clear out older stock.  Models from other PC brands may also be discounted when their successors arrive.