

# Purchasing a Computer

This page is obsolete. . . . . It was obsolete as soon as it was written.

The material presented here is in response to questions most asked by students.

## Upgrade vs. New Purchase:

- Ž If your computer is older than a Pentium - UPGRADE! Many older computers are not capable of using the latest hardware items.
- Ž If you can't make the upgrades yourself, you will have to add the cost of having the upgrades done for you.
- Ž If the cost of the individual hardware upgrades exceeds 50% of a new computer, purchase a new computer.

## Bundled Packages:

- Ž Many computers are sold with a bundled package of software. These may include games, greeting card makers and introductions to other software packages which must be purchased separately. This "software bundle" adds to the price of the computer.
- Ž The only software you absolutely need is the operating system.
- Ž Before purchasing your computer you should have some idea of what you intend to do with the computer. Adding the price of the additional programs to the price of the computer will give you a more realistic picture of the cost of a computer.
- Ž Many computers are sold with additional hardware such as printers, scanners and monitors. If you are upgrading and already have these items, consider buying a more "bare bones" computer. This can significantly lower the price of the purchase.

## Where and how to buy:

- Ž Research carefully before you buy.
- Ž Have an idea what the various parts of the computer are worth. This will enable you to do comparative pricing. For example: the size of the hard drive, amount of RAM and type of microprocessor. These are typically the items which vary between bundled computer packages.
- Ž Look through the sale papers from local computer stores. Often they list prices of individual upgrade items in addition to bundled packages.
- Ž If you find a "Great Deal" advertised, get to the store quickly. Often these are advertised as lost leaders and are in short supply. Ask the salesperson about upcoming sales.
- Ž Buy the best and biggest you can afford. This will reduce the changes that your equipment will require upgrading in the near future.

### Hardware Recommendations:

- RAM: 256MB (512MB)
- Hard drive: 40 GB or larger
- Video: 32MB - increase to 128MB if you intend to do a lot of graphic work.
- Modem: 56K v92 - Used for dial-up connections and connection to telephones. Fax and Voice Mail are additional options you might want.
- Sound: Generally if the computer comes with a CD-ROM it will also have a sound card.
- Network: 100Mb/s is the standard. Wireless is another option.
- CD-ROM: The latest CD-ROMs come with the capability to burn data. This allows you to save and share large amounts of data. CD-R media allows you to only write once to the disk. CD-RW allows multiple read/write and re-write capability, much like an old floppy. Data capacity is 700Mb.
- DVD: DVD's are for more than playing games and movies. Writeable DVD's can hold 8+Gb of data storage. There are several formats, Be sure your media matches your player/burner.
- Microprocessor:  
Intel - carries the brand names 486, Pentium, Celeron, Xeon, Itanium.  
AMD - carrier the brand name K5 , K6, Athlon, Sempron.  
Cyrix - carries the brand name 586, 686, etc. (no longer manufactured.)
- Ports:  
Serial: 9 pin DB connector. Rarely used today, but some mice still require this port on older machines.  
Parallel: DB25 used by printers, older zip and some scanners.  
PS/2: Round 5 pin connector used by mice and Keyboards.  
Plugging the wrong device in the port won't hurt the device or computer, only render the device inoperative until the correction is made. You might have to reboot if you get a message that "No mouse was detected."  
USB: Most commonly used port today. It can be expanded by using a external hub and used my several devices at the same time.

Lower end computers may come with all devices built into the motherboard rather than individual plug-in cards. These computers are often not expandable. Upgrading may require replacement of the entire computer.