

# Neighborhood Computer Club

Hosted by Duane Berglund at 3345 East Meadows Place 10am-1145am – 839-8599

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## PC Basics – Hardware, terminology

20 min

Desktop vs Laptop or Notebook

Monitor or display

Mouse - left and right mouse clicks; drag & drop; drag & resize

Wireless; USB ports, Firewire, serial, parallel

Chip Type – CPU chips (or *microprocessors*) contain an entire processing unit;

Memory chips contain blank memory

RAM (random-access memory): Same as main memory; *RAM* refers to *read and write* memory; in contrast to ROM, which permits only to read data. Most RAM is *volatile*, which means that it requires a steady flow of electricity to maintain its contents. As soon as the power is turned off, whatever data was in RAM is lost.

ROM (read-only memory): Computers almost always contain a small amount of read-only memory that holds instructions for starting up the computer. Unlike RAM, ROM cannot be written to.

PROM (programmable read-only memory): A PROM is a memory chip on which you can store a program. But once the PROM has been used, you cannot wipe it clean and use it to store something else. Like ROMs, PROMs are non-volatile.

Chip type/speed – Intel Pentium, AMD Athlon XP; mega-hertz (800 mhz, 1.8ghz, 3.0ghz)

RAM memory size – megabytes & gigabytes (256 megabytes to 1 gigabyte)

Disk capacity – megabytes (20gb to 100gb); corporate databases are in terabytes

Disk Options – hard drive, CD-ROM, DVD,

PCMCIA cards – wireless card, modem card, photo cards/sticks,

Function Keys F1-12; Num Lock; cursor arrows; Page Up/Down; End/Home

## Windows Basics – Navigation; Win-XP vs Win-2000 vs Win-98

40 min

Customizing your desktop

Icons – left click & arrange by name, type, etc

Wallpaper, Screen Savers, colors/size

Recycle Bin

Properties

How to Launch Programs – Start; Desk Top Icon; customizing your Start Up menu

Customizing your START menu

Ways to launch programs

Logoff vs turning off your computer

Programs

My Computer – View System Info, Tools/Folder Options, Favorites

Help – How To; Glossary, Shortcuts, Tools

Toolbar – the icon bar at the bottom of the screen

Properties

Tiling, Cascading

Task Manager

Properties

Control Panel

Add/remove hardware & programs

Customize your display – Themes, Desktop, Wallpaper, Screen Saver, Appearance, Settings

Folder Options

Security, Firewall,

Printers & Faxes

Disk directory

See Windows Explorer below

Virus protection – McAfee,

Anti-Virus, Firewall, SPAM filters

MS Office vs Works - Word, Excel, PowerPoint, Access

Multiple Windows Open, short-cut keys, resizing and moving open windows

Short-cut Keys – Alt-Tab, Shift-Tab

- Finding & managing files on your PC
  - Using Win Explorer
  - Start then My Computer
- Searching
  - Start then Search
  - Using Win Explorer

**Exercises** (Use START & HELP to learn more):

1. On your own computer using Explorer - find My Documents; My Music; My Videos; My Photos
2. Create several new sub-folders in My Documents and begin your personal file storage system
3. On your own computer – do several searches when connected online
4. Customize your IE View Tool Bars and play with tool bar options

RAM means random access memory. It is the area where data is stored temporarily while the microprocessor works on it. Random means the data can be stored anywhere in memory, and the microprocessor can go directly to it. That speeds things up.

RAM is a physical piece of equipment. When you look at a picture of a motherboard, you'll see two, three or four long slots near the microprocessor. The RAM goes there.

Many computers will run faster with more memory. That's why additional RAM is a common prescription for slow machines. If a large program can be stored in RAM, the microprocessor can manipulate it much faster. If not, data must constantly be called from the hard drive. The hard drive is much slower than RAM.

There are three main types of RAM.

- SDRAM (synchronous dynamic RAM)--The oldest, dating to 1996. It's the slowest of the three.
- RDRAM (Rambus DRAM)--The fastest and most expensive. Intel once swore by Rambus, but appears to be backing away now.
- DDR SDRAM (double data rate SDRAM)- I put in my new machine.

It's very fast, and relatively inexpensive.

It's important that you get the right amount of memory. Too little, and the computer pokes along. Too much, and you spend money for no benefit. So, here's my recommendation: If you have Windows 98 or ME, bring your machine up to 128 MB of memory. If you're running Windows XP, you need 256 MB. These are minimums; I put 512 MB in my computer, which has Windows XP.

Don't know how much RAM you have? Your System information includes RAM. In Windows 98 and ME, click Start>>Settings>>Control Panel. In XP, it's Start>>Control Panel. In all three systems, double click the System icon. On the General tab, you'll find the amount of RAM.

Adding RAM isn't too difficult. Your manual should help you pinpoint the location. You'll have to open the computer case. Beware of static electricity; it can kill the circuitry inside a computer. So ground yourself by touching a metal part first. If you are adding a 64 MB module to a system that already has two 32 MB modules, it should go in the first bank (bank 0--computers usually count from 0). Your manual should have the details.

Again, check your manual for the type of memory you need. In addition, it will tell you the maximum amount of memory the computer can handle. Don't exceed that. You'll get the maximum benefit long before you hit the memory maximum.