

Computer Hardware and Internet Safety for Kids

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Processor (CPU)

- Clock Speed (MHz/GHz)
- 32 vs. 64 bit
- Front side bus

Random Access Memory (RAM)

- Stores data while the computer is turned on
- Sized in MB (Megabytes)
- pc100, pc133, pc2100, etc.
- Double Data Rate (DDR) RAM

Hard Drive

- Stores data *permanently*
- Spindle speed (5400rpm, 7200rpm)
- IDE vs. SCSI
- Cache (2MB – 8MB)
- Sized in GB (Gigabytes)

Motherboard (Mainboard)

- Largest card in the computer
- All parts of the computer plug into and communicate via the motherboard
- Has connectors for peripherals (mouse, keyboard, printer, etc.)
- Size: AT, ATX, others

CD/DVD Drives

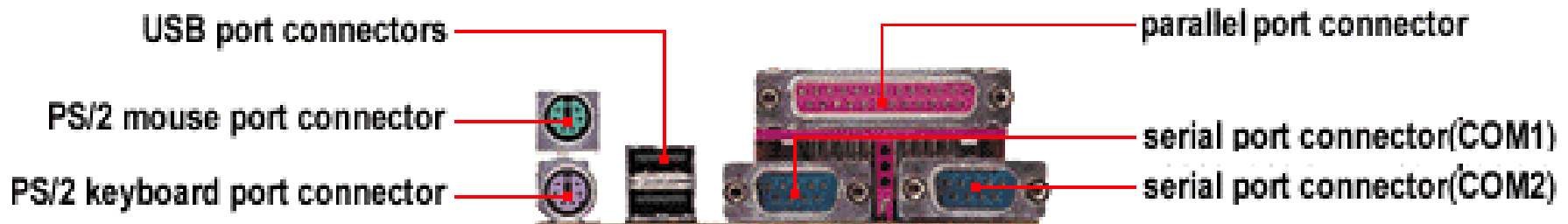
- CDROM – plays CD media
- CDRW – plays, writes, and rewrites CD media
- DVDROM – plays DVD and regular CD media
- DVDR – plays and writes DVD media
- DVDRW – plays, writes, and rewrites DVD and CD media

Expansion Cards

- Types of slots: PCI, ISA, AGP
- PCI is most common
- ISA is older, slower, and often left out of newer machines
- AGP – for video only
- Types of card: video, audio, network, tv, GPS, etc.

Computer Connectors

- Parallel port – usually for printer
- PS/2 – Keyboard and mouse
- Serial – modems, older hardware
- USB – scanners, printers, zip drive, digital camera, and many more



Computer Connectors

- Firewire (IEEE 1394) – included with most Macs, available on most PCs, used mainly for audio and video transfer
- RJ45 – connects to network, looks like large phone jack
- Audio jacks – allows you to connect speakers, microphone, or other audio hardware: green for speakers

Computer Maintenance

- Heat robs life from computers
- Allow proper ventilation around computer equipment
- Clean dust out of your system every six months
- Clean the mouse if it becomes erratic or non-responsive

Troubleshooting

- Use surge protection and consider a UPS
- Defrag/Scandisk
- Backup important information (online or to disk)

Troubleshooting

- Make sure everything is turned on
- Check the cables
- Check the controls (monitor + volume)
- Check for obvious damage
- Substitute a know good device
- Reboot / Restart / Log on as diff user

Troubleshooting

- Device manager
- Windows Update
- Hard Drive is noisy
- “non-system disk”
- Search online for other’s experiences

Peripherals

- LCD vs CRT Monitor
- Wireless Keyboard/Mouse
 - rechargeable
 - radio vs infrared
- Printers, Scanners, Combo's
- External Drives

Consider when Buying

- What is the computer going to be used for?
- What warranty/tech support is included?
- Buy as much as you can afford
- Laptop vs. Desktop
- You usually get what you pay for.

Keeping Kids Safe Online

Some of the risks are:

- Exposure to Inappropriate Material
- Physical Molestation
- Harassment
- Legal and Financial

Tips for parents

- Don't rely on a program to do your job!
- Be Pro-Active
- Participate with your child online
- Plan ahead
- Set time limits
- Set an Example
- Think "Mall"

Searching the web

- Family friendly searches
 - Yahooligans
 - Ask Jeeves Kids
 - Encyclopedia Britannica Online
 - Homework Planet

Internet Filtering

- Block by key word
- Block by url
- Products
 - Net Nanny
 - CyberPatrol
 - ISP provided

Filtering Software Differences

- Customizable filtering
- Filters other software applications.
- Blocks chat rooms and forums
- Prevents sending personal information in email
- Produces activity logs
- Produces periodic screen shots
- Limits time spent online

Chatting for Kids

- Never give real name and location
- Never meet anyone offline
- Never post email publicly
- Remember people lie
- Private chat?
- Monitored chat rooms
- Use manners
- Keep password secret

Email Don'ts

- Use full name as sender
- Give out passwords
- Use primary email for posting in public forums
- Respond to spam unsubscribe address
- Buy from spammers
- Include name in address

Kid's rules for online safety

- I will not give out personal information such as my address, telephone number, parents' work address/telephone number, or the name and location of my school without my parents' permission.
- I will tell my parents right away if I come across any information that makes me feel uncomfortable.
- I will never agree to get together with someone I "meet" online without first checking with my parents. If my parents agree to the meeting, I will be sure that it is in a public place and bring my mother or father along.

Kid's rules for online safety cont.

- I will never send a person my picture or anything else without first checking with my parents.
- I will not respond to any messages that are mean or in any way make me feel uncomfortable. It is not my fault if I get a message like that. If I do I will tell my parents right away so that they can contact the online service.
- I will talk with my parents so that we can set up rules for going online. We will decide upon the time of day that I can be online, the length of time I can be online, and appropriate areas for me to visit. I will not access other areas or break these rules without their permission.

When to Worry

- Screen Switching
- Odd Phone Calls
- Odd hours of the night
- Sudden influx of cash
- Unusually upset at an Internet interruption
- Withdrawal

Plagiarism, MP3 and the like

- Downloading copyrighted media is illegal without permission
- Reusing info from another site must be done with webmaster's permission
- RIAA and others are now prosecuting
- Many schools use services to detect stolen material