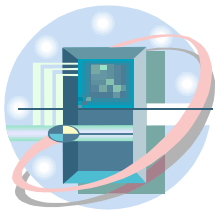


Network Backbone: A central cable that connects all devices on a local area network (LAN) and is the part of the network where the heaviest traffic occurs.

RAM: Random Access Memory or, in other words, the working memory of computers used for running applications and temporarily storing the data or information created by them. Think of RAM as elbow room. Computers with less than 32 megabytes of RAM just don't have enough elbow room to run most current applications. Most new computers come with at least 128 megabytes of RAM.



Router: A device that connects a LAN to the Internet and routes transmissions between the two. A router that connects a school LAN to the Internet is typically located within the school.

T-1 Line: A phone line connection that can handle about 1,500 kilobits of information per second. A T-1 line actually consists of 24 individual channels, each of which supports 64 kbps. Each channel can be configured to carry voice or data traffic. A T-1 line furnishes approximately the same quality of service as a cable or digital modem. T-1 lines are sometimes referred to as DS1 lines.

T-3 Line: A phone line connection that can handle about 43,000 kilobits of information per second. It is similar to a T-1 line, but it contains 672 individual channels. T-3 lines are sometimes referred to as DS3 lines.

Virus: A program or piece of code that is loaded onto your computer without your knowledge and runs against your wishes. Most viruses can replicate themselves. All computer viruses are manmade. A simple virus that can make a copy of itself over and over again is relatively easy to produce, but a more dangerous type of virus is one capable of transmitting itself across networks and bypassing security systems.

Wide Area Network: A computer network that spans a relatively large geographical area. Typically, a WAN consists of two or more local-area networks (LANs). Computers connected to a wide-area network are often connected through public systems, such as the telephone system, but they can also be connected through leased lines or satellites. The largest WAN in existence is the Internet.

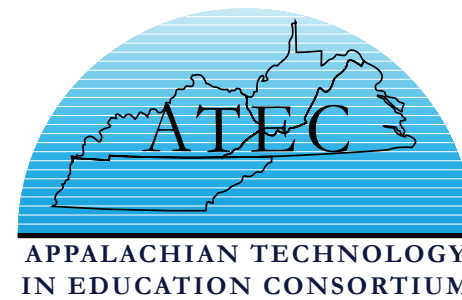
Wireless Technologies: Technologies that use the radio-frequency spectrum for transmitting and receiving voice, data, and video signals for communications.

Visit our web site for a more comprehensive list.

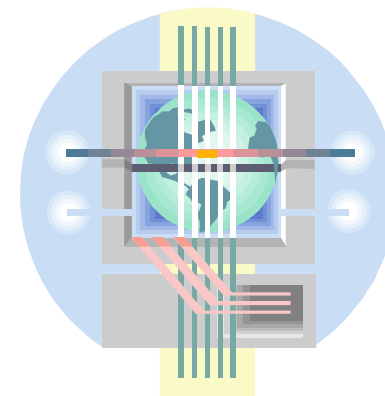
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Glossary of Computer Terms

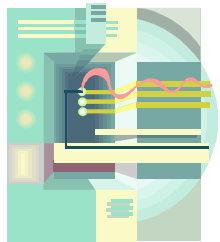


ATEC is a Regional Technology in Education Consortium funded by a grant from the U.S. Department of Education.

Anti-Virus: A utility that searches a hard disk for viruses and removes any that are found. An anti-virus program is an important ounce of prevention for any computer user who shares disks with other users or connects to the Internet. The major anti-virus programs protect against more than 57,000 viruses.

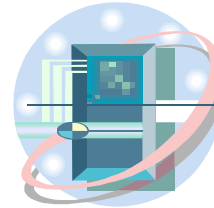
Bandwidth: Ever seen a cat chase a mouse through a skinny pipe? Ever watched an Internet movie on an out-dated computer with an old modem? If so, you've probably witnessed a bandwidth problem. Newer modems have bigger pipes. With this increased bandwidth, small chunks of information travel more quickly. Bigger chunks of information can get through.

Bits and Bytes: Say "binary digit" as fast as you can, and you may hear yourself say "bit." Bits are the binary digits or units of information processed by a computer in the form of 0's and 1's. Think of bits as the crumbs that together make up a byte. A byte is equal to 8 bits. That byte is a unit of storage capable of holding a single character or letter. When you see the word "cheese," think 6 bytes made up of 48 crumbs.



Broadband Network: A network that uses a single wire to carry several channels of information at once, thus enabling the simultaneous transmission of voice, data, and video. Cable TV, for example, uses broadband transmission. In contrast, the *baseband* transmission used by most LANs allows only one signal at a time.

Domain: The name of a computer or network on the Internet. Next time you look at someone's e-mail address, take a close look at the characters to the right of the "@" sign. They indicate the domain and tell you the type of organization that operates that domain (.org = nonprofit, .edu = educational institution, .com = commercial). The domain's name can also tell you the physical location of the computer (.ca = Canada, .uk = United Kingdom).



Filtering Software: Software that blocks Internet content on the basis of keywords or phrases. It intercepts the content on its way to your computer, evaluates it according to certain criteria, and either passes it along or stops it. Most K-12 schools use some form of filtering software.

HTML: HyperText Markup Language. The World Wide Web is built around this concept. The Web is composed of "pages," documents written in the HTML programming language. Often the authors of these pages do not know the HTML language. Instead, they use special software that adds the HTML programming code for them. Probably the most useful HTML trick is the ability to create hyperlinks within the page to other documents of relevance elsewhere on the Internet (this is what HyperText means). Browser software interprets the HTML code and displays the page in an easy-to-read format.

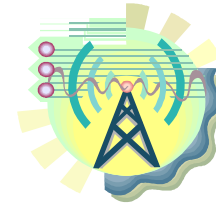
Kilobytes, Megabytes, Gigabytes, and Terabytes: A kilobyte is roughly 1000 bytes. A megabyte is about 1 million bytes (your floppy disk that holds 1.44 megabytes is capable of storing approximately 1.44 million bytes, or about 3,000 pages

of information). A gigabyte is roughly a billion bytes, and a terabyte is more than a trillion bytes.

Listserv: An online discussion or forum on a particular topic. Usually e-mail users who want to participate in the listserv send an initial e-mail to subscribe. They are then added to the list of subscribed members. Messages sent to the listserv are relayed to the other members. Many listservs are moderated—a person serving as the moderator reviews an e-mail message and decides whether to relay it to the other members.

Local Area Network: A computer network that spans a relatively small area, for example, a single building or group of buildings. LANs are capable of transmitting data at very fast rates, but the distances are limited, and there is also a limit on the number of computers that can be attached to a single LAN. Your school may use a LAN.

Modem: Short for **modulator-demodulator**. And that's what a modem machine does. When you send an e-mail, your modem modulates or turns your



computer's digital signals into analog signals for transmission over your telephone line. Then, when you check your e-mail, your modem demodulates or turns analog signals from your

telephone line into digital signals your computer can use. Traditional modems can now pass information at the rate of about 52 kbps (kilobits per second). The new broadband modems (cable modems and DSL modems) are about 30 times faster. Modems are currently the most common type of connection between computers.