What Is the Internet?

The Internet is a large system of computer networks that are linked together by a common language called the Internet Protocol. This large "network of networks" links computers of many different types and sizes and allows the users of these computers to communicate and share information through a variety of methods. The two most popular uses of the Internet are e-mail and the World Wide Web.

The Internet is not controlled by a single entity or organization, but rather is a collection of organizations (both private and governmental) that share resources and jointly fund the regional backbones that interconnect these organizations. The idea to remember is that the Internet is a network of networks. Each network is responsible for the information contained on its computers. There is no single place where the Internet is housed.

What Is the World Wide Web?

The World Wide Web—usually called simply "the Web"—refers to a network of computers that deliver their information in a specific programming language called HTML (HyperText Markup Language). HTML documents can be read by an application called a Web browser. Content on the Web can include pictures, text, video clips (or movies), and sounds. These different elements are placed together on what are called Web pages. Web pages are very similar to printed pages, although they can be as you wish and can include hyperlinks to related information.

The Browser Window

This is where the Web page is displayed. This window works like any other window on a computer. It can be opened, closed, resized, and moved around on the screen. Scroll bars at the right side and bottom of the window allow you to see parts of a page that are not currently visible (the Page Up and Page Down keys also work). The title of the current page appears at the top in the window's title bar or at the bottom of the screen.

Links

Words or phrases on a Web page that are links usually appear underlined and in color: most often blue if you have not yet clicked on them, purple if you have. (The creator of a Web page can specify the colors. You can change the colors of visited and unvisited links yourself by choosing Preferences on the Edit menu.) Click once on a link and the browser will retrieve the page associated with the link. In addition to text, graphics can also be links. To determine if a graphic is a link, move the mouse so the arrow is over the image. If the arrow turns into a hand, the image is a link. At this time the link's URL may also appear at the bottom of the browser window.

Buttons and Menus

Web browsers have similar features to help with Web navigation. These include a row of buttons at the top of the window and several menus. While not exactly the same in each browser, they are very similar.

Navigation Buttons

1. Back and Forward
2. Stop
3. Refresh or Reload
4. Home
5. Print
6. Favorites
7. Preferences

Menus

File/Print
Go
Bookmarks
Favorites
Edit/Preferences

Using URLs

Now that you know a bit about how a browser works, you need to know how to get to the information you are seeking. Web browsers use URLs to locate particular pages on the Web. The URL (Uniform Resource Locator) is the address for the site you wish to visit. For example, the address for Buckman Elementary School is *http://buckman.pps.k12.or.us* The letters http at the beginning of the URL indicate that the site is a Web server. The part after the double slashes indicates the name of the Web server that holds the requested information. The information to the right of a single slash is the path to the requested file.

URL Tips

Typing counts! An Internet address must be typed exactly as you find it, with every dot and slash in place. Find out how to make the ~ symbol on your keyboard, because it appears in numerous URLs. A missing period or even the wrong case for a letter—for example, upper case instead of lower case—may result in a "File not found" message. Web sites often change and even disappear. How can you know if the URLs on your Bookmarks or Favorites list are up to date? There are several services that will update your bookmarked URLs automatically. One such service is URL Minder, a free program that you can download from the NetMind Services Inc. Web site (www.netmind.com). The program notifies you when a URL for one of your bookmarked sites has changed.

Search Engines and Web Guides

If you know the location of the place you want to go, typing the URL in the location box will take you there. But if you do not know where to go to find the information you want, you will need to use a search engine or Web guide. Both are tools that can help you find information on the Web quickly. A search engine uses programs that continually search the Internet for information. These programs build a database, or index, of Web sites. When you go to a search engine site and enter a keyword or phrase, you are actually searching the database built by the search engine.

Web guides are sites that have already organized links and articles into subject categories. Examples of Web guides are Yahoo! and About.com. However, many Web guides have search capabilities, and a number of search engines have added links; therefore, there is little difference between search engines and Web guides. Both are useful tools for finding information.

Search Tips

• Use more than one search site. Each search engine works a bit differently, and no one contains everything to be found on the Internet.

• Use the help links. Most search sites have links to help pages that can guide you through the search process.

• Before you search, plan ahead. Think about what keywords you can use.

• The more specific you can be, the more likely it is that you will find relevant information. Remember that the Internet holds a vast amount of information; you don't want to wade through thousands of responses to your search query, many of which won't be pertinent. So instead of typing in a broad subject category such as *automobiles*, use *Model T* or *Henry Ford* to get closer to what you really want.

• Spelling counts! Check your spelling before you submit a search.

• Use similar words. If a certain word does not return a good response, try a synonym.

Parts of an E-mail Message

No matter what type of e-mail account you have, most e-mail messages share common elements:
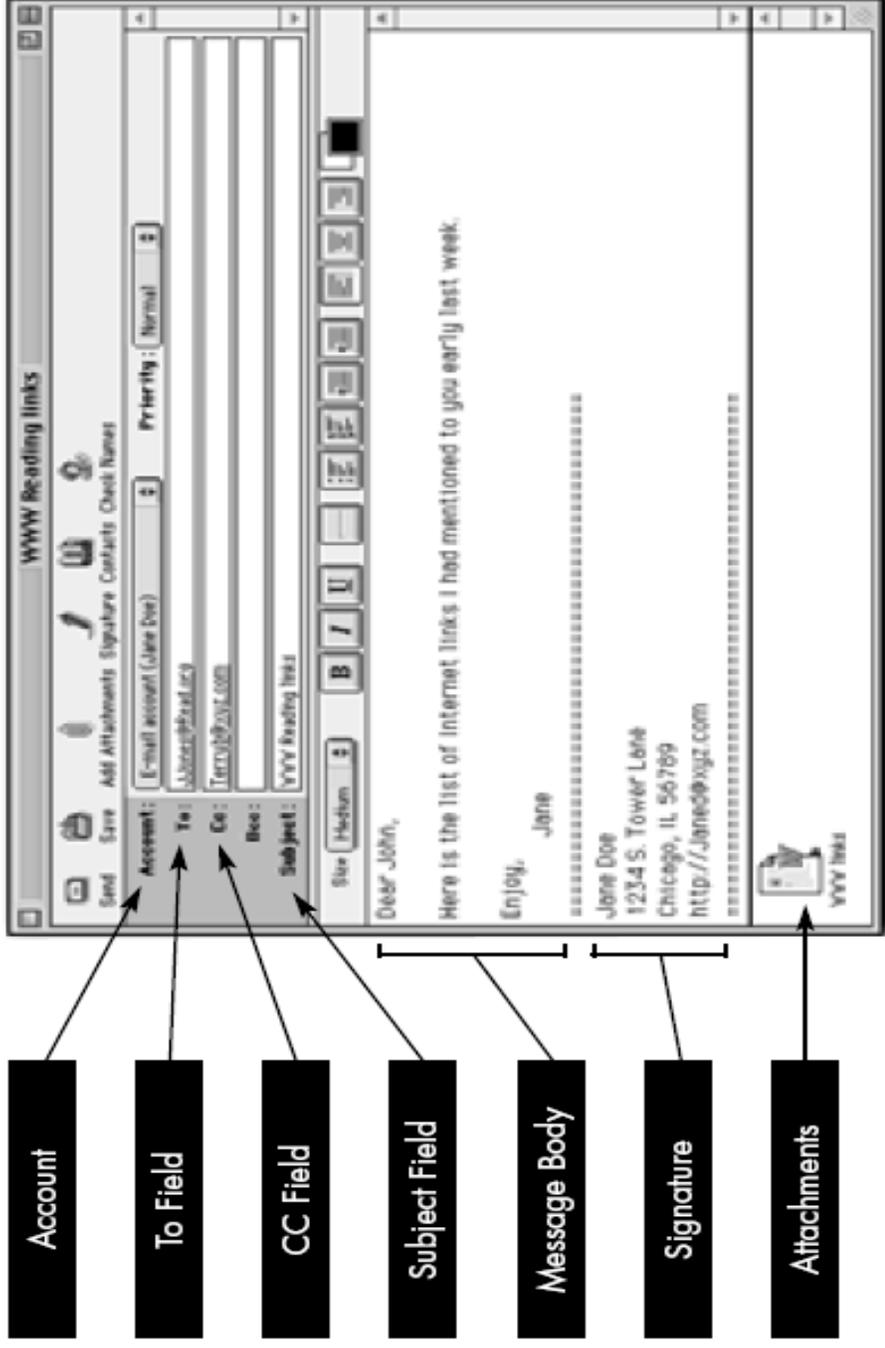
Account: This area automatically shows the name of the holder of the email account.

To Field: This is where you type the e-mail address of the person to whom you wish to send a message. You can send the same message to several people by including all of their addresses in this field. Messages that are incorrectly addressed will be returned to you, identified as un-deliverable.

CC Field: The CC field allows you to send a copy of the message to someone else besides the addressee in the To field. CC originally stood for "carbon copy" but it has come to stand for "courtesy copy."

Subject Field: This is where you state the topic of the message.

Message Body: The message body contains the actual message.

Signature: Many e-mail programs also allow you to include a signature that gets attached to the bottom of your messages. A signature is similar to letterhead on stationery. This signature can be used to give additional information about yourself, such as your mailing address, your Web page address, and your phone number.

Attachments: Most e-mail applications allow you to attach computer files to a message. For example, when sending a friend a message about a recent outing, you might attach a digital photograph to the message. You can include multiple attachments, although files that contain

Account

To Field

CC Field

Subject Field

Message Body

Signature

Attachments

E-mail

By far the most popular use of the Internet is for the exchange of electronic mail, or e-mail. E-mail is a messaging system that allows any user on the Internet to send a message to any other user. With e-mail you can send messages addressed to specific individuals, receive messages from others, and receive messages from members of a group.

E-mail Addresses

An e-mail message is always sent to an address. An e-mail address will contain the user name of the individual to whom you are sending the message and the name of the server where his or her mail is collected. For example, the following address is for a fictional person named Jane Doe:

janed@xyz.com

Jane's user ID is janed, and her electronic mailbox is located at her place of work, a company called XYZ. *Com* at the end of an address denotes a commercial e-mail account. Other common endings are *edu* for educational institutions, *org* for organizations, and *gov* for governmental institutions. Note that the user ID and the mailbox computer are separated by the @ symbol.

Most e-mail addresses can be typed in all lower-case letters, all capital letters, or a combination of the two. However, some addresses are "case dependent," meaning you need to type them exactly as they appear or the message will be returned to you, marked as undeliverable.

Free E-mail Accounts

It's very easy to find free e-mail accounts that you can access via the Web. When you buy a connection to the Internet at home (for example, through AOL, Earthlink, or a local telephone or cable company), you get an e-mail account to go with it. If you or your students do not have a computer at home, it's still possible to get e-mail accounts that you can access at public places with Internet access, like public libraries or Internet cafés. With an e-mail account, you and your students can participate in many online activities!

Some of the common free accounts include:

- Gmail -- 6.5 GB free e-mail storage
- Yahoo – 100MB free e-mail storage
- Hotmail – 250 MB free e-mail storage

Free accounts will carry some advertising, both on the Web page where you retrieve your e-mail and on each e-mail you send from that account. Most free accounts will have a similar registration process.

You'll be prompted to create a unique user name, which will become part of your e-mail address, and a related password. It's a good idea to use a combination of letters and numbers in your password, and to avoid using real words, names, or obvious information about yourself. It's also a good idea to periodically change your password! You will usually be prompted to enter a security question that can be used to create a new password, if you forget yours. As soon as your account is created, you are able to use your new e-mail account with the user id and password you've created.

You'll generally have an inbox, where new e-mails can be found, a sent box, to view the e-mails that you've sent to others, a draft bin, where you can save an e-mail that you don't want to send just yet, and a trash bin, where you can file e-mails you'd like to delete. Many e-mail services now offer a bin where the e-mail service will automatically place messages that look like junk mail.