The Information Highway: A New Mode of Travel

The **Internet** is a collection of computer networks. A good way to think of this is to imagine your telephone system. From your phone, you can dial up and contact any other phone in the world. The Internet permits you to use any computer with the right program to connect with any other computer or database that is also programmed for such a connection. This connection can occur through phone lines, cable systems, or directly wired access. The Internet allows users to view, retrieve, or share information with other users around the world. The use of the Internet allows you access to information that is current, ever-changing, and not limited to resources available within the school setting. However, like the information you get from a book or other resources, information from the Internet should be checked for accuracy and appropriateness.

The Internet opens many doors to educational opportunities that were never before possible. Users can communicate with peers and/or mentors around the world. They can interview authors or witnesses to actual events and then write about the experiences. Internet users can also get up-to-date current events and contemporary literature before it comes out in printed material. The Internet also provides you with the opportunity to publish and to share your own work, as well as to collaborate on projects with people on the other side of the world.

The Internet has its own language—terms and phrases that are used to describe applications and other items common to this system. Words or phrases that are underlined are defined within this list.

> **Browser:** A software program on an individual machine (computer) that is used to view various Internet resources.

> **Electronic Mail (e-mail):** Messages, usually text, sent from one person to another via computer. Pictures and files can be sent as attachments to be viewed by other programs. E-mail can also be sent automatically to a large number of **Internet addresses** (Mailing List).

> **File Transfer Protocol (FTP):** A common method of moving files between two computers. FTP is a special way to logon to another Internet site for the purpose of retrieving and/or

sending files. There are many Internet sites where material or programs can be obtained by using the word *anonymous* when you login. These sites are called *anonymous* FTP servers.

Home Page (or **Homepage**): (1) The **web page** that your browser is set to use when it starts up; (2) the main web page for a business, school, organization, person; or (3) the main page of an Internet site.

Hypertext: Text (usually colored or underlined) that contains links to other **documents** or sites. Pictures can also be links to other information.

HyperText Markup Language (**HTML**): The coding language used to create hypertext documents for use on the World Wide Web (WWW). HTML files are meant to be viewed using a web browser such as *Netscape* or *Internet Explorer*.

HyperText Transport Protocol (**HTTP**): The protocol for moving hypertext (HTML) files across the Internet. *HTTP* is the beginning of a World Wide Web address written as: http://

Internet Relay Chat (**IRC**): Multiuser live chat. A chat room is an Internet site that allows you to communicate with others. It may be public or private and cover a wide range of topics. CAUTION: Be careful who you are "chatting" with as you don't know who they are.

Listserv: The most common kind of mailing list. Users can subscribe to a list and receive messages generated by other members.

Netscape: A WWW Browser and the name of a company.

Network: Two or more computers connected together so that they can share resources. When two or more networks are connected together, it is called an *internet*. Two or more networks connected for company or internal private use is called an *intranet*.

Newsgroup: A bulletin board system that allows users to post messages, ask questions, and receive responses. Newsgroups are classified by specific topics. Messages and replies remain posted for a period of time for reference.

Posting: A single message entered into a newsgroup or e-mail system.

Search Engine: A program that connects you to a database of web sites and Internet resources. Enter a topic or keyword(s) and a search engine will locate databases or listings that may contain the information you are in search of.

Server: A machine on a network that many users access and use to store or retrieve information. A web server houses Internet sites and shares web pages and/or files.

Transmission Control Protocol/Internet Protocol (TCP/IP): This is the protocol that defines the Internet. To be truly on the Internet, your computer must run TCP/IP software.

Telnet: The command/program used to login from one computer to another.

Uniform Resource Locator (URL): The standard way to give the address of any resource on the Internet that is part of the WWW. A URL looks like this: http://www.yahoo.com

World Wide Web (WWW): The entire collection of Internet resources that can be accessed including text, graphics, sound files, etc., using web *browsing* software.

Image by storyset on Freepik

Search Engines: A Valuable Research Tool

The Internet gives you access to an ever-growing wealth of information. In many of your research projects, you will want to be able to search this huge bank of data and select relevant information. There is a vast amount of information available online, some of it accurate and relevant, some of it not, and you need to be able to recognize the difference.

There is really no one complete Internet reference available. Numerous search engines are available to locate specific information. Different search engines provide different results based on their method of searching. Some search for titles of web pages, others for keywords. It is helpful to try one or more different search engines to compare results and find other relevant locations. Make the task of searching with a search engine easier by dividing the process into steps.

To locate commonly used search engines, you can choose *Net Search* on the **button bar** of the *browser* **window**. This will connect you to a **menu** of search engines. Be patient, as this site can sometimes be very busy. The URLs of these search engines and other directories have been provided below. To connect to any of the following search engines below, type in the complete URL in the location line of your *browser* and then press *enter*. There are many other searches that are available, and some are tailored to specific needs such as images, phone numbers, or maps. Some of the most common search engines are as follows:

Google: http://google.com

Yahoo: http://yahoo.com

Bing: http://bing.com

Internet Searching and Boolean Wording: Narrowing Your Search

1. Identify a general topic or keyword. Start with a general word or topic and then get specific. (**Example:** Begin with the general topic *wars* then *Vietnam.*) Identify other terms or synonyms that can be used to describe this topic. Use a subject catalog or directory (like Yahoo) to find the general area. Online library catalogs also use Boolean operations for keyword searches.

2. Use **Boolean wording** to narrow down your search.

   - To locate multiple words use AND. The AND will look for titles or keywords that contain all of the words specified. (**Example:** To find information on Florida Panthers, an endangered species, try searching for "Florida AND Panther.")

   - To locate items that may have multiple names or spellings use OR. The OR will look for titles or keywords that contain either of the words specified. (**Example:** To find information on e-mail, try searching for "email OR e-mail")

   - To eliminate unwanted references use NOT. The NOT will eliminate unwanted references that include the word you do not want. (**Example:** To find information on panthers [an endangered species, NOT the hockey team], try "panthers NOT hockey.")

   Panther
   (an endangered species in the cat family)

   NOT

   Hockey
   (a sports team)

   - As you get more and more specific in refining your search, use combinations of AND, OR, and NOT. (**Example:** "Florida AND Panthers NOT hockey.")

3. Try another search engine that uses a different searching technique. Some search engines are better than others when looking for specific information or for certain types of information. Try several and compare your results. Make sure that you read the "search tips" or "help" and understand how to search using that particular search engine. Find out if the search engine uses AND, OR, and NOT or "+" and "-."
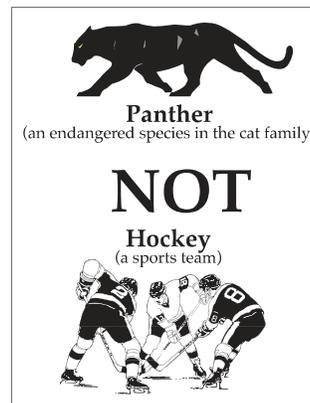
Other tips for better searches are listed below:

1. Make sure that your topic is spelled correctly.

2. Capitalize names or proper nouns.

3. Leave out common words and prepositions to narrow your search. Specific or uncommon adjectives help limit your search.

4. Check the way that the search engine you are using works. Can you limit/increase the number of "hits" or references returned? Does the search engine accept Boolean searching terms or does it use another search method?

5. Analyze your results and then refine your search. Are you getting too few or too many results? Do you need to be more specific or more general in your search? Would it make sense to use a directory or list search to narrow down your topic or search within a category?

6. Try another search engine with the same keywords.

7. Be patient. It sometimes takes time to find specific information.

Tips for Better Searches

	✔	check spelling
○	✔	capitalize names or proper nouns
	✔	narrow your search
○	✔	check how the search engine works
	✔	refine your search
	✔	try another search engine
○	✔	be patient

Sending and Receiving Electronic Mail: The Computer Postal Service

One very common and valuable use of the Internet is the sending and receiving of electronic mail or e-mail. E-mail is very similar to the kind of mail you send by way of the U.S. Postal Service. You have an address at which you receive mail, and you send mail to others at their addresses. You can send or receive a message from any computer that is online to any other computer that is online. One advantage that e-mail has over regular mail (snail mail) is speed. E-mail travels from one site to another, often in a matter of seconds. However, some mail services only send or retrieve mail at periodic intervals and may not be instantaneous.
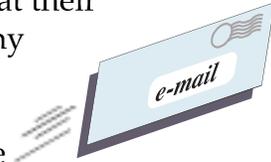
E-mail procedures will vary depending upon the type of computer and e-mail server you use. Your teacher will make sure your computer has been set up properly. Read the steps below and the diagram on page 16 to see one way to send and receive e-mail.

Outlook:

Open Outlook: *Launch the Outlook application on your computer or log in to your Outlook account through a web browser.*

Compose New Email: *Click on the "New Email" button. This typically looks like a square icon with a pencil or pen.*

Enter Recipient(s): *In the "To" field, enter the email address(es) of the recipient(s). You can also add recipients to the "Cc" (carbon copy) or "Bcc" (blind carbon copy) fields if needed.*

Subject: *Type a concise and descriptive subject line that summarizes the content of your email.*

Compose Email: *Click on the large blank area below the subject line to start typing your email message. You can format text, add attachments, insert images, and more using the formatting options available.*

Attach Files (Optional): *If you need to attach files, click on the "Attach File" button (usually represented by a paperclip icon) and select the files you want to attach from your computer.*

Review and Send: *Once you have composed your email and attached any necessary files, review it to ensure everything is correct. Check the recipient(s), subject line, and email content. When you're ready, click the "Send" button to send your email.*
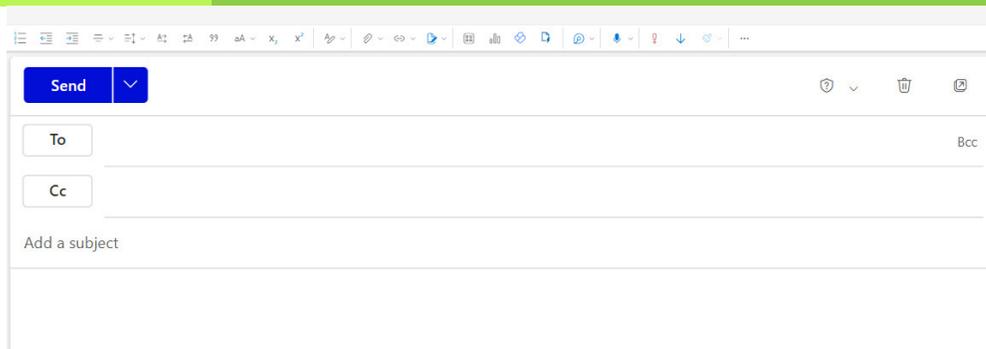
Gmail:

Open Gmail: Sign in to your Gmail account using your web browser.

Compose New Email: Click on the "Compose" button, usually located in the top left corner of the Gmail interface. It's represented by a red-colored button with a pencil icon.

Enter Recipient(s): In the "To" field, enter the email address(es) of the recipient(s). You can also add recipients to the "Cc" or "Bcc" fields if needed by clicking on the respective links below the "To" field.

Subject: Type a brief and descriptive subject line that summarizes the content of your email.

Compose Email: Click in the large blank area below the subject line to start typing your email message. You can format text, add attachments, insert links, and more using the formatting options available in the toolbar.

Attach Files (Optional): To attach files, click on the paperclip icon in the bottom toolbar. This will open a file explorer window where you can select the files you want to attach from your computer.

Review and Send: Once you have composed your email and attached any necessary files, review it to ensure everything is correct. Check the recipient(s), subject line, and email content. When you're ready, click the "Send" button (usually located in the bottom left corner) to send your email.
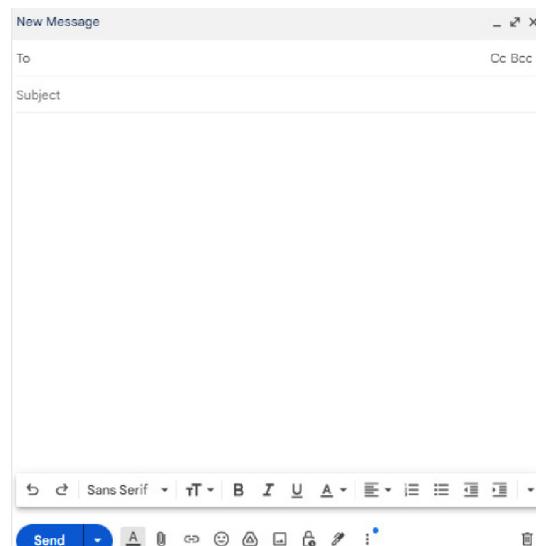
Citing Electronic References: Credit Your Internet Source

It is important to give credit for information from other sources. Internet and **electronic references** or sources are no different from other reference materials except that they are constantly changing. One of the major reasons to cite references is to be able to locate the information again. When citing a reference, it is important to obtain the following information: name(s) of authors(s), title of document, title of complete work (if available), complete address of site, and document date or latest revision.

The **MLA (Modern Language Association) style** for citations of electronic resources is very similar to that for nonelectronic resources. It should include all applicable information from the resource. Document titles should be enclosed in quotation marks, and complete titles should be in italics or underlined. The Internet is not a permanent or static resource, so it is very important to include the date you accessed or received the information and the date of the last revision. It is also helpful if you set your web browser to print the title, address, and date on pages that are printed out for reference and to print e-mails or listservs that are used.

The following order is used when citing an Internet reference:

Last name of Author, First name of Author. Title of Document. Title of Entire Work (if applicable). Version, if applicable. Document date or revision date (if different from access date). Complete Internet address including path (date of access).

World Wide Web Sites

Last name, First name. "Title of document." Complete title of site. Document or revision date (if different from date accessed). Complete Internet address (date accessed).

Walker, Janice. "Walker/ACW Style Sheet." December 1996. http://www.cas.usf.edu/english/walker/mla.html (13 March 1997).

E-mail, Listserv, and Newsgroup Citations

Last name, First name. Subject of posting or mail. Address or type of communication if personal e-mail (date of access).

Gates, Bill. "Where do you want to go today?" Personal e-mail. (1 August 1997).

Smith, Mary. "Welcome to Think Quest." majordomo@advanced.org (31 December 1996).

FTP (File Transfer Protocol) Site

Last name, First name. "Title." Document date. Complete Internet address (access date).

Wentworth Publishing Co. "ERIC - Language Arts Lesson Plans." 7 May 1997. ftp://ftp.wentworth.com/wentworth/(29 June 1997).

Classroom-Connect/Lessons/NEW/21-ERIC-Plans/ New-Lessons/Language_Arts/Abbreviate.txt (20 May 1997).