

Internet Notes

Name: _____ Hour: _____

Once you spend time on the World Wide Web, the graphical portion of the Internet, you will begin to feel like there is no limit to the amount of information you can find. You can spend hours entertained by the sheer variety of things people post on their websites. So just what is this miraculous creation? Think of it as a system of millions and maybe billions of computers linked together across the globe. Each computer stores electronic files, known as **web pages**, which you can access from your computer. The Web allows us to communicate in a rich way, by displaying text, full color graphics, photos, sounds and even video.



The Web is known as a **client-server** system. Your web browser software is the **client**; the remote computer, which stores the data, is the **server**. For instance, when you are looking at the schools website, your computer (the client) has requested the web page from a server located in my office. The web server sends the data you've requested over the Internet to your computer. Your web browser interprets the data and displays it on your computer screen.

The glue that holds the Web together is called **hypertext** and **hyperlinks**. This feature allows electronic files on the Web to be linked so that you can easily jump between them. On the Web, you navigate through pages of information based on what interests you at that particular moment. This is commonly known as **browsing** or **surfing** the Net.

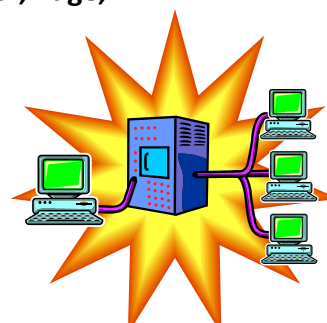


The World Wide Web (WWW) was originally developed in 1990 at CERN, the European Laboratory for Particle Physics. It is now managed by The World Wide Web Consortium, also known as the **World Wide Web Initiative**.

A web browser is the software program you use to access the World Wide Web, the graphical portion of the Internet. The first browser, called **NCSA Mosaic**, was developed at the National Center for Supercomputing Applications in the early '90s. The easy-to-use point-and-click interface helped popularize the Web, although few then could imagine the explosive growth that would soon occur.

Although many different browsers are available, **Microsoft Internet Explorer**, **Edge**, **Google Chrome**, **Firefox**, and **Safari** are the most popular.

Both Internet Explorer and Firefox have a small picture in the upper right hand corner of the browser. When this image is animated, it means that your browser software, known as a **client**, is accessing data from a remote computer, called a **server**. The server can be located across town or on another continent.

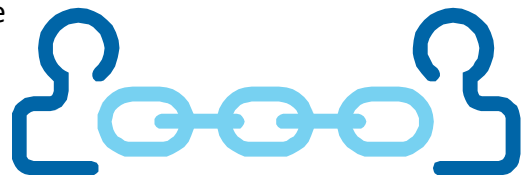


The row of buttons at the top of your web browser, known as the toolbar or ribbon, helps you travel through the web of possibilities, even keeping track of where you have been. Since the toolbars for each of the web browsers are slightly different, we will first describe what the commonly occurring buttons do:

- The **BACK** button returns you the previous page you've visited.
- Use the **FORWARD** button to return to that page again.
- **HOME** takes you to whichever home page you've chosen.
- **REFRESH** does just that, loads the web page again. Why would you want to do this? Sometimes all of the elements of a web page haven't loaded the first time, because the file transfer was interrupted. Also when you download a web page, the data is **cached**, meaning it is stored temporarily on your computer. The next time you want that page, instead of requesting the file from the web server, your web browser just accesses it from the cache.
- **PRINT** lets you make a hard copy of the current document loaded in your browser.
- Finally, the **STOP** button stops the browser from loading the current page.

When you browse the World Wide Web you'll see the term **home page** quite a lot. Think of a home page as the starting point of a website. Like the table of contents of a book or magazine, the home page in most cases gives an overview of what you'll find at the website. A website can have one page, many pages or a few long ones, depending on how it's designed. If there isn't a lot of information, the home page may be the only page. But usually you will find at least a few other pages.

Web pages vary wildly in their design and content, but most use a traditional magazine format. At the top of the page is a masthead or banner graphic. Then there's a list of items, such as articles, often with a brief description. The items in the list are usually **hot**, meaning that they are linked to other pages in the website or to other websites. Sometimes these links are highlighted words in the body of the text or are arranged in a list, just like an index. They can also be a combination of both. A web page can also have images that link to other content.



How can you tell which text is hot? Text links appear in a different color from the rest of the text -- usually blue and usually underlined. When you move your cursor over a text link or over a graphic link, it will change from an arrow to a hand. And by the way, the **hot** words often hint at what you will link to.

When you return to a page with a link you've already visited, the hypertext words will often be in a different color -- usually red or pink -- so you know you've already been there. But you can certainly go there again. Don't be surprised though, if the next time you visit a site, the page looks different and the information has changed. The Web is a dynamic medium. To encourage visitors to return to a site, some web publishers change the pages often. That's what makes browsing the Web so exciting.

You can think of the **World Wide Web** as a network of electronic files stored on computers all around the world. **Hypertext** links these resources together. **Uniform Resource Locators** or **URLs** are the addresses used to locate these files. The information contained in a URL gives you the ability to jump from one location on the Web to another with just a click of your mouse. Most web browsers allow you to type in a URL to access a particular document or service. When you click on a hypertext link in an **HTML** document, your web browser is actually sending a request to download a file stored on a remote computer.



What does a typical URL look like? Here are some examples:

<http://www.minidokaschools.org> – Our school district web site.

<http://www.hampsterdance.com.com> – A silly website that used to be popular.

<http://www.google.com> – A commonly used search engine.

<http://www.foxnews.com> – A news website.

Here is how you can translate a web address so you know what it is talking about.

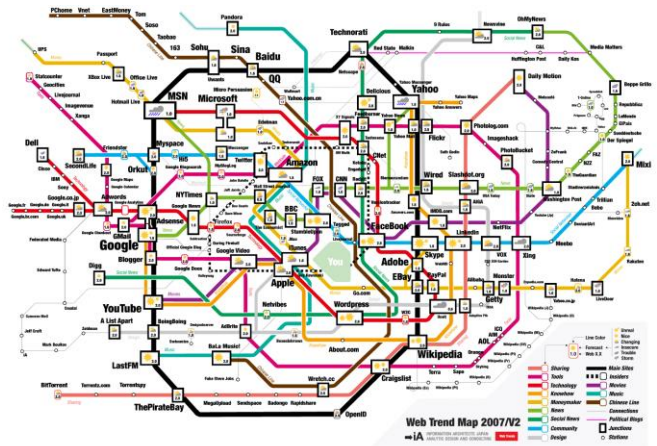
- http = HyperText Transfer Protocol
- https = A website that is encrypted (scrambled up) so you can enter credit card numbers, or other personal information safely
- www = World Wide Web
- foxnews = the name of the server you are going to (can be anything)
- net = the extension of the server (can be anything from the following list)

net = Network	ca = Canada
com = Commercial	jp = Japan
gov = Government	uk = United Kingdom
edu = Educational	Other countries
mil = Military	
- index.html = The name of the web page on the server



There are also some things you need to know about URL's

1. A URL usually has no spaces.
2. A URL always uses forward slashes.
3. If you enter a URL incorrectly, your browser will not be able to locate the site or resource you want.
4. You can find the URL behind any link by passing your mouse cursor over the link. The pointer will turn into a hand and the URL will appear in the browser's status bar, usually located at the bottom of your screen.



Source: <http://www.learnthenet.com>

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History of the Internet

1969

- ARPANET commissioned by the DOJ (Department of Justice)
- UCLA, Stanford, USCB and the University of Utah are the first colleges to be on the Internet

1971

- 15 computers connected
- Mail invented



1984

- 1,000 computers
- News groups formed

1986

- 5 super computers put online, allowed more users to connect

1987

- 10,000 computers



1988

- 1st internet virus (called a worm)

1989

- 100,000 computers

1990

- WWW invented



1991

- 376,000 computers

1992

- 1,000,000 computers
- "Surfing the net" coined

1993

- White House sets up a web page
- WWW grew 341,634% in one year
- 2,000,000 computers



1994

- 1st Internet shopping mall goes online
- Spam first hits
- Pizza Hut has online ordering
- 3,800,000 computers



1995

- 5,800,000 computers

1996

- Microsoft and Netscape go head to head
- Countries start restricting internet access
- 16,700,000 computers

1997

- 26,000,000 computers

1998

- Internet users get to be judges in a performance by 12 world champion ice skaters on March 27th making this the first time a sports performance was determined its viewers
- 36,700,000 computers

1999

- www.business.com was sold for 7.5 million dollars for just the name.
- 56,000,000 computers
- 9.5 million web servers

2000

- November 7th – Day the Internet was used the most in history up to this point.



2005

- YouTube founded

2006

- 92 million websites are online

2007

- 1.114 billion people use the Internet

2012

- 2.4 billion people use the Internet
- People spent 1 trillion dollars online

Source: Hobbes' Internet Timeline - <http://www.zakon.org/robert/internet/timeline/>

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