

Our Tangled Web

Be a Power Reader

Read and React If your teacher will let you work with a study buddy, this strategy can help you understand difficult material. Read a paragraph aloud. When you finish, look up at your partner, who must say something about the material you just read. (This requires good listening skills.) It could be a comment that makes a connection. If your buddy asks a question, work together to find the answer. This works best if you stay focused on the material you just read.

What's the Problem?



Have you ever looked closely at a spider's web? Spider webs are built very carefully. The interwoven threads create a distinct pattern. This pattern is repeated over and over as the web grows.

Today we all use a different kind of web: the **World Wide Web**, or simply the **Web** for short. The Web is a network of hundreds of thousands of computers around the world containing **multimedia** documents. It's these documents that we access when we're using the Web.

Wouldn't it be wonderful if the Web were built like a spider's web? However, the Web is not structured liked this. Instead the Web's millions of documents are interconnected in ways that are constantly changing. So we must learn special ways to find what we need.

Finding What We Need

You are probably familiar with many ways to find information on the Web. Here are some of them:

- Entering a Web site's URL. A URL can be thought of as the site's address.
- Clicking a hyperlink.
- Using a search engine.

- Clicking a browser button.
- Let's take a look at each of these ways.

Uniform Resource Locators

Your address tells where you live. It tells your city (or rural area), street, and street number. With this information and the right maps, people can find your house. Every Web page also has its own address. This is called a **uniform resource locator**, or **URL**.

We use special applications called **Web browsers** to allow us to access the Web and move from one Web site to another. Examples of Web browsers include Netscape Navigator and Microsoft's Internet Explorer. Near the top of a Web browser's window is a box where you can enter the URL of a site to which you want to go.



Microsoft's Internet Explorer Web Browser

The letters at the end of a URL help you identify the type of Web site you are accessing. Take a look at the following:

<http://www.uiowa.edu>

If you enter this URL into your browser, you will go to the University of Iowa Web site. We know this is an educational site because of the “.edu” in the URL. Many countries use two-letter country codes. Two examples are “.jp” for Japan and “.uk” for United Kingdom. Below is a table that will help you identify some types of sites.

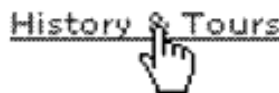
| Identifier | Explanation |
|------------|-----------------------------------|
| .com | commercial |
| .edu | educational, such as a university |
| .gov | U.S. government site |
| .mil | U.S. military site |
| .net | network services |
| .org | a not-for-profit organization |

URLs are everywhere we look. You learn about interesting URLs from television and magazine ads, textbooks, friends, and teachers. When someone gives you a URL, remember to be very careful to get the spelling exactly right. Just one wrong letter can keep you from getting where you want to go.

We're All Linked

Why do you think the World Wide Web has the word “Web” in its name? The main reason is that its sites are interlinked. **Hyperlinks** (or **links** for short) connect a Web page to another page. Hyperlinks may appear as either underlined colored text, buttons, or graphics. For example, you might go to the White House Web site (www.whitehouse.gov) to learn about Thomas Jefferson. At the bottom of the

White House’s **home page** is a link labeled “History & Tours.” Clicking that link will take you to a Web page where you can learn about past U.S. presidents. This is an example of an **internal link**. It takes you to another Web page within the White House Web site. An **external link** takes you to a Web page that is part of a different site.



If you want to know whether something is a link, put your mouse pointer on it. If it changes shape (for example, it may change into a hand with an upward pointing finger), it’s a link. Just click to go to the linked site.

Searching for Info

A **search engine** is an application that allows you to enter one or more words. It then searches the Web for pages that contain these words. Popular search engines include Google, Yahoo!, and Overture.

A major problem with search engines is that they often return far more Web sites than you can possibly examine. For example, if you enter “Thomas Jefferson” into the Google search engine, you get a list of over 1.6 million Web sites!



Searching for “Thomas Jefferson” returns more than 1.6 million results.

Fortunately, there are ways that you can refine your search. Refining a search makes the search more specific. Most search engines

have a button labeled “Advanced Search.” Click this button and a screen appears. This screen lets you refine your search.



An advanced search locates information on the 1800 election of Thomas Jefferson.

Here are some advanced search options available on many search engines.

- **Exact phrase.** This option tells the search engine to locate only those pages containing the exact phrase that you enter. For example, if you enter “1800 election,” the search engine will not return Web sites that contain the phrase “election of 1800.”
- **None of these Words.** This option allows you to eliminate certain topics.
- **Language.** You can specify that only Web sites using a specific language be found. This can be useful if you want to practice your Spanish or Russian.

- **Update.** Selecting only Web sites that have been updated recently (say within the last three months) can help you when you need current information, such as news on recent scientific discoveries.
- **Site/Domain.** Sometimes you may want to search for specific types of Web sites. For example, you may want to find only information from educational sites such as universities. In this case, you could tell the browser to locate only “.edu” sites.

You will want to experiment with these different options and see how each one affects the results you get.

Browser Buttons



Let’s suppose that you are on a Web site that discusses Alexander Hamilton and then click a button that takes you to a Web site about his wife, Elizabeth. You then decide you want to go back to the previous Web site. A quick way to do this is to click your browser’s “Back” button. Each time you click this button, you go “back” one more Web page. If you click “Back” once, and then click the “Forward” button, you will be returned to where you were before pressing “Back.”



Review Questions

1. How is the World Wide Web similar to a spider's web? How is it different?
2. List three ways to find information on the Web.
3. How is a URL similar to your street address? List the different types of sites you can visit on the Web today.
4. How is an internal link different from an external link?
5. What are some of the advantages of refining a search?



What Do You Think?

1. There used to be a television commercial in which a man got a new super-fast computer. After sitting at the computer for a while, he said to his wife, "I've reached the end of the Web." Is this possible? Why or why not?
2. What search engines have you used? Do you have a favorite? If so, why is this search engine your favorite?
3. Access a search engine that has advanced search options. What are some of the options not discussed in this article? Explain how two of these options work.

Glossary

external link A hyperlink that takes you to a different Web site.

home page The main page of a Web site. This is usually the page you go to first.

hyperlink A spot (usually text or graphics) on a Web page that, when clicked with a mouse, will allow you to "jump" to related information. Hyperlinks can also be used in documents other than Web pages. Also called a *link*.

internal link A hyperlink that takes you to another location in the same Web site.

multimedia The use of different forms of media, such as text, graphics, sound, and video.

search engine An application (usually on the Web) that lets you search for information based on specific words and other instructions that you enter.

URL (uniform resource locator) An address that identifies a specific Web page.

Web browser An application used to access the Web and to move from one Web page to another. Examples include Netscape Navigator and Microsoft's Internet Explorer.

Web page An individual screen within a Web site. A Web site can contain many pages.

World Wide Web A collection of multimedia documents stored on hundreds of thousands of computers around the world. Many of these files contain hyperlinks that allow users to move from one to another. Also known simply as the **Web**.