

**Goal** • Practise using the Internet for scientific investigation.

## Introduction

The Internet is a useful tool that contains information stored in sites. To be as focussed as possible before you start researching on the Internet, try the following techniques:

- Prepare key words for your topic.
- Become familiar with search engines.
- Become familiar with your computer's ability to customize Internet searches.

Be sure to follow your teacher's guidelines for safe, secure, and polite use of the Internet.

## What to Do

Read the information about "Key Words" and "Search Engines," then answer the following questions.

### Key Words

Internet search engines look for information based on the words you enter. To start a search, or to continue one if you get lost clicking links, you can enter or reenter key words you have prepared before logging on to your server. To use this technique, prepare key words about your topic using a list, flow chart, or concept map. Start with words you already know, along with related words from the textbook or from books or magazine articles you have read. As you do searches on the Internet, you can add words that you think are helpful.

To make your research more effective, combine words that are closely related. For example, suppose that you are looking for information on solar energy. When you enter just those words into a search engine, the search engine will give you thousands and thousands of suggested sites, most of which will not interest you.

To reduce the number of hits or "matches" the search finds, you can use "AND," "OR," and "NEAR" to combine key words. (Enter these words in capitals so that they are not confused with the subject of a search.)

With the combination "solar NEAR energy," a search engine looks for links in which the two words appear close to each other. You would get even more specific results with the combination "solar NEAR energy AND green OR friendly OR appropriate." Add "NOT" and "retail" and you can effectively eliminate most commercial sites as well.

### Search Engines

Search engines proved Internet users access to sites through their index. Some cover general topics, while others are for a particular area. Your teacher may suggest search engines or websites for you to explore. You save time if you can take shortcuts to get to the site.

To do this, keep track of useful Internet search engines and websites. Record the names of search engines and addresses of sites as carefully as you would record observed data in a science experiment. You may find it convenient to draw tree diagrams for the path of the search, as well as website addresses.

Create a "bookmark" from the menu in order to mark valuable sites. Save your bookmarks on a disk that you use only for them. Label your disk to locate it easily the next time you want to do Internet research.

If you are doing research on a computer at home, you can save bookmarks in your browser. Keep a list of sites that you think are not useful. Avoid them in future.

As you experiment with quick ways to find information on the Internet, share your findings with your classmates and friends. They may have found search engines and websites that you could use.