

Objectives

- Select the appropriate type of Internet search tool.
- Find a Web site by performing a keyword search in a Search Engine.
- Limit a search by requiring or excluding terms, using filters, and searching for a phrase.

Handouts

- [Search the Web](#)
- [Why Can't I Find What I'm Looking For?](#)
- [Going on an Internet Scavenger Hunt](#)

Search Tools of the Internet

Do you have a favorite search tool you currently use? What do you recommend to others? Different search tools work best in different circumstances. Being familiar with the strengths and weaknesses of various search tools helps you choose the best one for your searches.

The type of information you are looking for often determines what type of search tool you should use. If you are looking for information that could be considered a major topic of interest, you could probably find it easily in a directory. If you are searching for information that might not be easy to find, you will probably want to use a search engine or a metasearch tool.

There are three major types of search tools, which differ in the way they find and display web sites:

- Directories
- Search Engines
- Metasearch Tools

Each search tool looks a little different, but all are essentially large databases of Web sites. By searching these databases, you can find Web sites relevant to your needs.

Using Directories

A directory is a collection of Web sites that have been reviewed and arranged into subjects by people rather than by computer. Each Web site is placed into a category and subcategory, possibly with an annotation or summary. Directories usually accept submissions from people or use automated tools to find new pages on the Web.

Most search directories offer a search feature you can use to search the collection of Web sites in the directory, although all entries are listed under one or more subject headings. The extent of human interaction in categorizing Web sites varies by search directory.

The screenshot shows the Yahoo! Directory homepage. A red box on the left contains the text "Use the Directory Search Box to search the directory listings." with an arrow pointing to the search box at the top right, which is also circled in red. Another red box on the left contains the text "Top Level Directory - click on any link to access more specific information." with an arrow pointing to the left-hand navigation menu. The menu lists various categories such as Arts & Humanities, Business & Economy, Computers & Internet, Education, Entertainment, Government, Health, News & Media, Recreation & Sports, Reference, and Regional. The main content area on the right is titled "The Spark: Current and Upcoming Events" and lists several events with dates and links.

Activity: Use a Directory to Browse Topics

Search for tourist information on Seattle, Washington. If you want to search for information on another city or town, just replace *Seattle* with another city's name and *Washington* with another state's name.



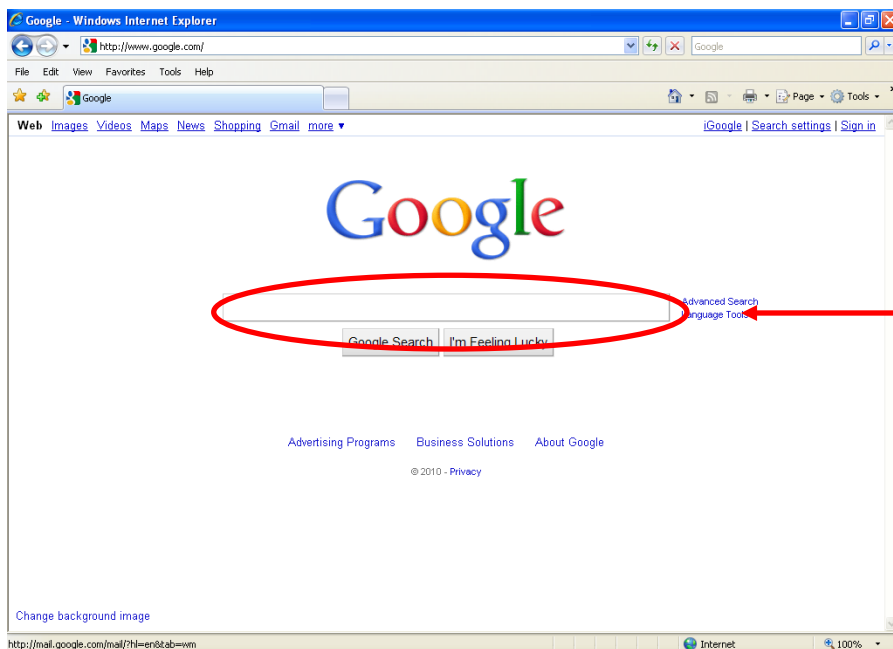
1. Double-click the **Internet Explorer** icon on the desk top.
2. Type <http://dir.yahoo.com> in the address bar and click <Enter> on the keyboard.
3. Select the topic heading that matches the information you want to find. For instance, if you were looking for travel information on Seattle, you would select the following links: Recreation & Sports>Travel>By Region>U.S. States>Washington>Cities>Seattle. Select a topic of your choice to view.
4. Note that you may also search within the directory. Try a search for travel information on a destination of your choice.
5. Browse a topic of your choice.

Using Search Engines

The main characteristic that distinguishes search engines from directories is how the Web sites in their databases are gathered and organized. A search engine finds Web pages by using small, automated computer programs called spiders, or crawlers. These programs continuously visit Web pages and add links to the search engine's database.

Because the sites are recorded automatically, search engines are often quite large. Search engines usually do not provide descriptive summaries and organized categories for their Web pages like a directory does, because there is little or no human interaction in creating the database of Web sites. Instead, the search engine will likely display the first few lines of each Web page found on the search results page.

Keyword searches are the primary method used for finding information in search engines. Although search engines have large lists of Web sites in their databases, these sites are not evaluated for content or accuracy. Look under the categories for "Help," "Search Tips," or "Advanced Search" for additional information and tips on using a particular search engine.



Enter your search terms (keywords) in the search box.

Activity: Use a Search Engine to Search Keywords

1. Type <http://www.google.com> in the address bar and click <Enter> on the keyboard.
2. Type *seattle travel* in the **Search** text box and click **Google Search**. The Google window displays search results for travel in Seattle.
3. Click a link to located information on travel in Seattle.
4. Try another search for travel information on a destination of your choice.
5. Try another search on a topic of your choice.

Understanding the Google Results Screen

The image shows a screenshot of a Google search results page for the query "dog training". The page is displayed in a Windows Internet Explorer browser window. The search results are organized into several sections: "Everything" (Maps, Videos, Books), "All results" (Past 24 hours, Related searches, Wonder wheel, Page previews), "Books for dog training", "Searches related to dog training", and a "Next" button for pagination. Red boxes and arrows highlight specific features: "Search Results – click on any title to access site." points to a search result title; "Suggestions for related searches." points to the "Searches related to dog training" section; "Web sites that have paid to be included with the results of your search." points to a sponsored link; and "Click on a page number of Next to see the next 10 results." points to the "Next" button. The search results include titles like "How To Train A Dog, dog training tips and techniques for home...", "BEST DOG TRAINING - At Home Dog Training Programs : Puppy Behavior...", and "Adams Dog Training and Dog Behavior".

Search Results – click on any title to access site.

Suggestions for related searches.

Web sites that have paid to be included with the results of your search.

Click on a page number of Next to see the next 10 results.

Techniques for Refining Your Search

Why is it sometimes difficult to find information on the Web? Just as one organization does not control the Internet, one organization does not establish an overall search mechanism leading to every site on the Web. Instead, there is an array of search tools from which you can choose. Each tool is slightly different and is geared toward whatever group or niche its creators are trying to reach.

To help you find the right information from millions of Web pages, search engines offer many options for refining your search and narrowing the number of Web pages you retrieve. You can use the following search techniques to find exactly what you are looking for:

- Using multiple keywords.
- Using phrase searching.
- Filtering by date or language.
- Using search engine Help features.

Using Keywords

A *keyword* specifically describes what you are looking for. For example, a search for *disease* in the search engine Google will return over 250,000,000 pages; but a narrower search for the specific term *lupus* returns just over 20,000,000 pages. Be careful when using common terms - you will likely receive an overwhelming number of results, called *hits*.

Most search engines search for Web pages containing all the terms you enter in the **Search** box. To get more specific search results, use more-specific search terms, such as the term *German shepherd* instead of the term *dog*.

You can also exclude a specific word from your search results by adding a – (minus sign) before the term you wish to exclude. Note that there is no space between the minus sign and the term you wish to exclude from your search.

Another method of keyword searching is to search for multiple terms in a specific order. Called *phrase searching* this is done by placing quotation marks around the terms.

Activity: Perform searches using keywords and phrases.

1. Multiple Keywords

- Type *dog training* in the **Search** box. How many hits did you get?
- Type *dog training Oregon* in the **Search** box. How many hits did you get?
- Type *golden retriever training Oregon* in the **Search** box. How many hits did you get?
- Try a search of your choice using multiple keywords.

2. Restricting Keywords

- Type *buffalo NY* in the **Search** box. How many hits did you get?
- Type *buffalo -NY* in the **Search** box. How many hits did you get?
- Try a search of your choice by excluding search terms.

3. Phrase Searching

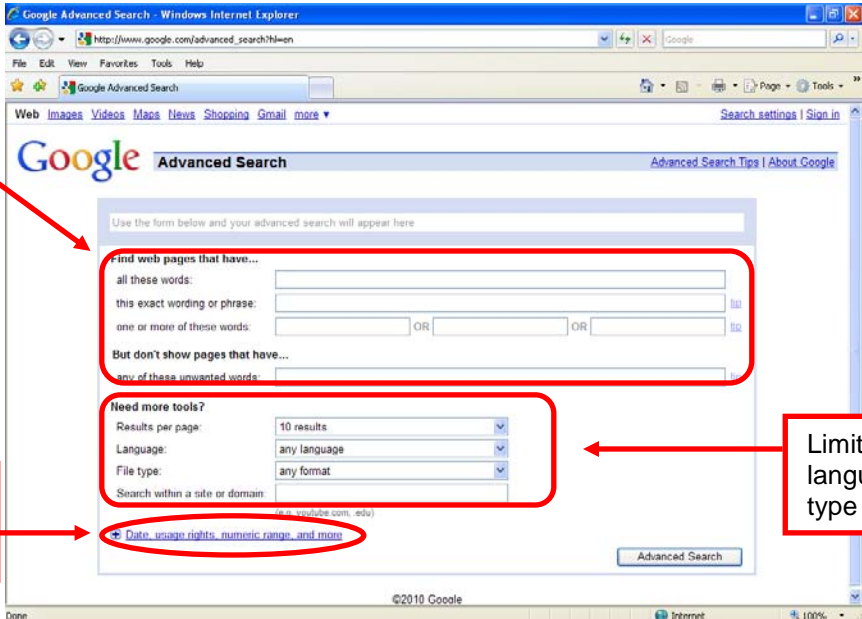
- Type “If music be the food of love, play on” in the **Search** box. Where is this quote found?
- Type “Scarlet billows start to spread” in the **Search** box. Where is this quote found?
- Try a search of your choice for a poem or song.

Narrowing Your Search

What does a kitchen strainer do? It acts as a filter, allowing some particles through and blocking others. Through the use of multiple keywords, restricting keywords and phrase searching, we can narrow searches effectively. In addition, many search engines have built-in filters, providing you with additional options for refining your search. For example, you can:

- Search for sites within a specified time period.
- Search for sites in a specific language.
- Search for a term in the Web address, such as a specific domain or country code.

Using Google's Advanced Search



The screenshot shows the Google Advanced Search page in a Windows Internet Explorer browser. The page title is "Google Advanced Search - Windows Internet Explorer" and the URL is "http://www.google.com/advanced_search?hl=en". The page features the Google logo and the text "Advanced Search" with links for "Advanced Search Tips" and "About Google". Below the logo, there is a search form with several sections:

- Find web pages that have...**: This section includes three input fields: "all these words:", "this exact wording or phrase:", and "one or more of these words:". Each field has a "Go" button to its right.
- But don't show pages that have...**: This section includes one input field: "any of these unwanted words:".
- Need more tools?**: This section includes four dropdown menus: "Results per page:" (set to "10 results"), "Language:" (set to "any language"), "File type:" (set to "any format"), and "Search within a site or domain:" (with a small "Go" button to its right).
- Date, usage rights, numeric range, and more**: This section is a link that is circled in red.

Three callout boxes with red arrows point to specific features:

- A box on the left says: "Enter your search terms by adding words or phrases. Note you can also exclude words." It points to the "Find web pages that have..." section.
- A box on the bottom left says: "Expand to limit by date, region and more." It points to the "Date, usage rights, numeric range, and more" link.
- A box on the right says: "Limit by language, file type or domain." It points to the "Need more tools?" section.

Activity: Search using Google's Advanced Search

1. Click the **Advanced Search** link from Google's main page.
2. Type your search criteria in the **Find** boxes. To do a search for Washington State, you could type Washington in the **all these words** box and George in the **"don't show"** word box.
3. Select a date range in the **Date** list.
4. Click **Advanced Search**. Your results are displayed in the window.
5. Try a few searches of your own using the features offered through advanced searching.

SEARCH TIP: Use lowercase letters in your keyword search because some search engines filter out keywords with capital letters.

When a Search Doesn't Seem to Work (Handout – [Why Can't I Find What I'm Looking For?](#))

Sometimes you will try a search and nothing seems to be working. There are some common mistakes that even the best Web searchers make. Always check your spelling, punctuation, and capitalization. Review the **Scenarios** and **Answers** on your handout for solutions to some common errors.

Activity: [Going on an Internet Scavenger Hunt](#) (Handout)

Practice your Internet-searching skills by completing the “Going on an Internet Scavenger Hunt” worksheet. Most of the questions don't have specific answers, but if there is a specific answer to a question, it is listed at on the back of the worksheet.

Additional Resources

Searching the Web

- Searching the Web
<http://www.ext.nodak.edu/miv/curriculum/smenu.html>
- Seven Habits of Highly Effective Web Searchers
<http://websearch.about.com/od/searchingtheweb/a/sevenhabits.htm>
- Web Search Strategies
<http://www.learnwebskills.com/search/main.html>
- GCF LearnFree.org, Internet 101
<http://www.gcflearnfree.org/internet101>

Search Engines

- How Search Engines Rank Web Pages
<http://searchenginewatch.com/2167961>
- Search Engine Showdown
<http://www.searchengineshowdown.com>