

Guide to Internet Research

Search engines, meta-search engines and directories can be effective tools to find information. However, most students get frustrated when the search terms entered yield too many results or the results are irrelevant to their topic. The following guide provides tips to make online searching easier and hopefully more productive.

Preparing to Search

- 1) Ask yourself, "What am I looking for?"
 - First, try to state your topic as a question.
 - Then, brainstorm and then jot down keywords and phrases that might describe your topic.
- 2) Think about your project and goals for the information you are seeking.
- 3) Write down questions on what you are looking for and think about the ideal article title that would tell you what you want to know. These may give you ideas on search terms.
- 4) Consider other ways you might describe your topic and *write them down*.
 - One word may have various meanings. For example, you may be interested in learning about baseball bats instead of the flying kind of bat. Think about the meanings you are not interested in. You may be able to use these words to narrow down your search later.
 - If applicable, write down related words that mean the opposite. For example, employment and unemployment may both find information on unemployment because they are complimentary topics.
- 5) Next, choose a search method.

Search engines

These search tools allow users to enter search terms, and the search engine then searches the web for results. Below are some common search engine URL's.

www.yahoo.com
www.bing.com
www.google.com

www.dogpile.com
www.askjeeves.com

Search Engine Tips

Read the search engine's Help, Search Tips, Power Searching, or Advanced Search Link to get tips on how to best use that search engine.

Here are some tips for using one common search engine.

Google

- Be specific in your choice of search terms. For example, choosing “vacation Hawaii” will yield better results than just “vacation” or “Hawaii”.
- Google does not recognize capitalization in search terms.
- Do not enter “and” between search terms.
- Common words, such as “where” or “how” are ignored when entered as search terms.
 - If a common word is essential to your search, put a “+” sign before it.
- Enclose proper names or phrases in quotation marks, such as “chocolate chip cookies”.
- What if a search term has more than one meaning? Put a “-“in front of words related to a meaning you want to avoid.

Virtual Reference Collections

If you need to find facts fast or you want to have access to the best websites on a certain academic subject, virtual reference collections can be a good alternative to visiting a brick and mortar library.

Internet Public Library

Enter the IPL and under the “Reference” section you will have access to reference sources, such as almanacs, biographies, calculation and conversion tools, census data and demographics, dictionaries, encyclopedias, genealogy, news, quotations references, and telephone directories. Also under the “Subject” section a user can access librarian evaluated lists of web sites relevant to many subject areas.

<http://www.ipl.org>

World Fact Book

For each country in the world, detailed data is included about: geography, people, government, economy, communications, transportation, military, and transnational issues.

Tip: To search for information on a specific county, just click “Countries” then select a country from the drop down alphabetic list.

<https://www.cia.gov/library/publications/the-world-factbook/index.html>

Web Directories

How to Find Subject-Focused Directories for a Specific Topic, Discipline, or Field

There are thousands of specialized directories to look up information on practically every subject. If you want an overview, or if you feel you've searched long enough, try to find one. Often they are done by experts -- self-proclaimed or heavily credentialed. Per the UC Berkley Library, here are some recommended directories, and some ways to find them:

Web Directories	Librarians' Internet Index www.lli.org	Infomine infomine.ucr.edu	About.com www.about.com	Open Directory Project http://www.dmoz.org/	Yahoo! dir.yahoo.com
Size, type	Over 20,000. Compiled by public librarians. Highest quality sites only. Great, reliable annotations.	Over 125,000. Great, reliable annotations. Compiled by academic librarians from the University of California and elsewhere.	Over 2 million. Generally good annotations done by "Guides" with various levels of expertise.	About 5 million. Selected by the Open Directory Project and enhanced by Google searching and ranking. Often useful to find "better" results, especially on broad or widely covered topics.	About 4 million. Very short descriptions. Often useful, especially for popular and commercial topics.
Phrase searching (what's this?)	Yes. Use " "	Yes. Use " " term term requires exact match	Yes. Use " "	Yes. Use " "	Yes. Use " "
Boolean logic (what's this?)	AND implied between words. Also accepts OR and NOT, and ().	AND implied between words. Also accepts OR, NOT, and ().	No.	OR, capitalized, as in Google's web search engine .	Yes, as in Yahoo! Search web search engine .
Truncation (what's this?)	Use *. Also stems . Can turn off stemming ("fuzzy search") on Advanced Search page.	Use *. Also stems. Can turn stemming off. Use " " or to search exact terms.	Use *. Not accepted consistently.	No.	No.
Field searching	Advanced Search allows Boolean searching within subject, titles, description, parts of URLs, and more.	Select options under search box to limit to Author, Title, Subject, Keyword, Description, various subject categories, and more.	No.	Same as in Google's web search engine .	As in Yahoo! Search web search engine .

Use any of the Subject Directories above to find more specific directories. Here are some tips:

- In the [Librarians' Index](#) or [Infomine](#), look for your subject as you would for any other purpose, and keep your eyes open for sites that look like directories. Read through the descriptions. Sometimes these resources are identified as "Directories," "Virtual Libraries," or "Gateway Pages."

- In [Yahoo!](#) and [Google](#), try adding the terms **web directories** to your subject keyword term:

EXAMPLES:

civil war web directories

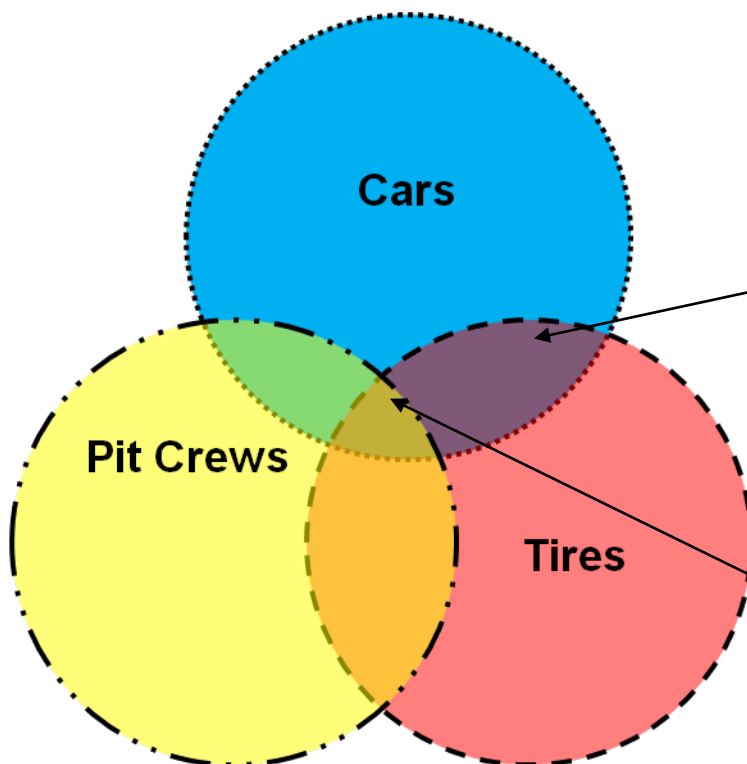
weddings web directories

- In [About.com](#), search by topic and look for pages that are described as "101" or "guides" or a "directory." About.com is written by "Guides" who, themselves, often are experts in the sections they manage. Sometimes they write excellent overviews of a topic.

Search Strategies

Boolean Searching

Boolean connectors can help you expand or narrow the amount of results you get. These are: AND, OR, and NOT and these words can be used individually or in combination in your search as connectors. AND Statements are good for narrowing your search results examples are found below.



AND Statements

In this example, if you wanted to do a search on "Cars" AND "Tires", you would get results that were about both cars and tires. Information on "Pit Crews" was not included in your search. In the diagram to the left this is graphically represented by the intersection of the blue and red circles, which is the purple section.

If you wanted information on "Pit Crews" AND "Cars" AND "Tires" you would get information that contained all three of these terms. This is represented by the small section where all three circles meet.

OR Statements

If you wanted information on Cars OR Tires you would get all information represented by the Blue and Red Circles.

NOT Statements

If you wanted information on Pit Crews but NOT Tires you would get all information represented by the yellow circle and the green section of Pit Crews. The orange section of Pit Crews would not be included in search results.

Evaluating Sources Found on the Internet

Sources used in research need to be reliable, quality information. Here are some tips to ensure you get quality sites with accurate content.

- Don't automatically click every link. Scan the titles, headlines, and descriptions if provided to gauge information quality.
- Consider the URL or web address ending. Websites ending in *gov, mil, or edu* tend to have reliable sources of information as long as it represents the official presence of an institution, such as the Library of Congress. Watch sites authored by students or employees of these institutions because the site content may not be reliable.
- Accountability- Consider who is responsible for the site and the creation of its content.
- Bias- Look for sites that are not slanted to one point of view. If they are, you may not be able to trust the site information. Beware of sites with concealed or overt agendas.
- Currency- Depending on the topic, you may need more recent or older information.
- Integrity- Try to make sure you have the original source of information or can cite the original source if needed. Information can get distorted and become inaccurate or plagiarized easily.