

1. Basic Google Searching

Basic searching is extremely simple. Enter a query into Google by typing in some key words, then hit enter or click on the Google Search button. The price of this simplicity is a large list of often irrelevant results. There are, however, ways to perform more complex searches from the basic search form. Some of the techniques below can help you quickly refine your results to find exactly what you need.

Simple Searching

Google automatically performs a boolean and with search terms. This means that Google returns results that contain all the words in a query. Adding more words to the search will reduce the size of the result list. Reducing the number of results is desirable, but increasing the relevance of results is more useful for the searcher. Adding search terms reduces the size of the results, adding more precise words will increase the relevance. *While adding words will increase relevance, Google limits searches to the first ten words entered into the search field.*

Using the fairly common name Donnie as an example lets do some searching.

You saw a professional football player called Donnie something on TV, but you can't remember his whole name. Searching **donnie** will produce a large list of results. You could browse, but why not narrow the field. Break your search into key concepts. Assign a word or two to each concepts and search. Use the most precise words for each concept. Search using **donnie football**. (There is no need to put the word "and" in a search.) This produces a smaller list, but try again with an even more precise term **NFL** rather than **football**.

Combining Terms Using NOT (-)

A boolean "NOT" search matches pages which mention one term but excludes any of these pages which mention the NOT term.

Suppose you wanted to find pages about a movie call Donnie something. You know that it is not called *Donnie Brasco*. In Google, NOT" is represented by a minus sign, so enter **donnie -brasco**. The minus sign immediately precedes the excluded word, with no intervening space.

Combining Terms Using "OR"

Using "OR" in a search matches pages where at least one of the words is present. The word OR *must* be capitalized.

You would like to see pages about the movie Donnie Darko or the musician Donnie Munro, enter **donnie darko OR munro**.

Common Words and Phrases

Unless you specifically request it Google will ignore common words, some single digits and single letters. You will be notified by Google if a common word has been excluded.

If a common word is required include it by putting a "+" sign in front of it. You must include a space before "+".

You saw a movie called Harry and something. Try search for **harry and**. The word **and** will be ignored in the search Try again entering **harry +and** compare the results. After the second search you should see results for *Harry and Tonto* or *Harry and the Hendersons*.

Another method for doing this is conducting a phrase search, which simply means putting quotation marks around two or more words. Words in quotation marks will be searched in the exact order they are entered.

Search using "**harry o**" to find results about the 70's detective show. (Of course combining "harry o" with tv would yield even more precise results.)

Capitalization

Google searches are **NOT** case sensitive. All letters will be understood as lower case.

Synonyms

Google can perform synonym searching. This allows concept searching rather than just keyword searching. If you want to search a synonym type in a ~ immediately before the keyword. Search using **~diet ~food**. You will get results that include the words, recipe, weight loss, recipes, meal and others.

Basic Searching Tricks

The following techniques can be used to narrow your results list for accurate searching.

Domain Restricting

This feature is exceptionally useful for narrowing down a search. You can tell Google to restrict searches to a specific Internet domain or even a specific site. For example you can restrict a site to any page in the edu domain. The search results will block anything not on an educational web site. This tool alone can greatly restrict search results by blocking the huge number of results on commercial web sites.

To use domain restricting enter **site:[domain or site name]** after your keywords.

Try searching **captain scarlet**. Suppose however you are not interested in a 60s scifi show. Search again using these terms **captain scarlet site:mil**. You will see a much smaller result list. You will also notice that the results are limited to web sites in the mil (military) Internet domain. There is a good chance any results will pertain to military uses of the keywords. Had you restricted the search to the *com* domain you would have only returned pages from commercial web servers.

Restricting searches to specific domains *may* be helpful in weeding search results.

Some common domains

com commercial organizations
edu educational institutions
gov government organizations
mil military organizations
net network organizations
org organizations that don't fit in any of the other categories

Many countries have their own domains.

jp	Japan	au	Australia
ca	Canada	fr	France
de	Germany	mx	mexico
ru	Russia	uk	United Kingdom

[Look here for a list of country domains.](#)

In Title Searching

All pages on the Internet have a title. The title of this page is Mina Rees Library - Google Tutorial. Titles are entered into the source HTML of the page. Usually they are very descriptive and so Google has provided a way to search for the contents of a title. Use the "intitle:" command to search for pages by only looking in the contents of the title.

For example **intitle:pimpernel** will only search for pages with the word pimpernel in the title. (There is no space between the colon and the search term).

In URL Searching

All pages on the Internet have an URL. The URL of this page is <http://library.gc.cuny.edu/tutorials/google.asp>. An URL is the Uniform Resource Locator. It is the unique address of a page. Google has provided a way to search for the contents of an URL. Use the "inurl:" command to search for pages by only looking in the contents of the URL for a keyword.

For example **inurl:IBM** will only search for pages with the word IBM in the URL. (There is no space between the colon and the search term).

Typically organizations try to place their name in an URL. Searching URLs will therefore provide pages made by an organization, not pages about them.

In Text Searching

Google has provided a way to search the body of a page, ignoring the contents of links, title or URL. Use the "intext:" command to search for pages by only looking in the body of a page. Text searching can be useful if you are getting false hits caused by link text. Many pages contains links that are only loosely related to the main content. A page about sharks may have a link titled "Dolphins and other marine creatures". If you are searching for a page about dolphins the shark page would appear as a valid hit although the text of the page only concerns sharks.

Entering **intext:pimpernel** will only search for pages with the word pimpernel in the URL. (There is no space between the colon and the search term).

Find a Definitions

Google can be used as a simple online dictionary. Enter `define:[term]` to find only a definition.

Enter **define:fallout**. (There is no space between the colon and the search term).

Find a File Format

A large number of file formats can be found on the Internet. In addition to HTML and graphic files there are documents created by office applications such as Word, Acrobat and Excel. Google is able to filter our specific formats and search their content. The format for file type searching is `filetype:[file extension] [search terms]`. A file extension is a three letter term associated with a specific file type. For example DOC is the extension for MS Word files. A large number of files, especially government documents, are stored in the Adobe PDF (portable document format).

Try entering **filetype:doc** fallout

Try searching fallout as a regular search. Compare the number and type of results you get.

2. Image Searching

If you are looking for images Google has created an image search feature. On a standard Google search screen click on the word images. Perform a search as usual and you will see a list of images as well as the web sites the images is from.

3. More

Follow this link to find some obscure Google functions. Often Google uses this area as a laboratory for new search techniques. If you have some special searching requirements you may find the right tool here.

4. Advanced Searching

Select this option if you feel the need to narrow your search results without resorting to using complex search strings. The advanced search page presents you with a number of fields and drop down menus rather than type commands. This is a fine option if you only do complex searches occasionally. If you run complex searches more often you will find the advanced search screen time consuming. It pays to learn how to use the basic search screen more effectively.

5. Preferences

Select this option to make permanent changes in the way Google works on your computer. You can select language settings, filter settings or result list settings. *The settings are stored in a cookie. This means your preferences will not follow you from computer to computer. If you are using a public computer don't use this option. Cookies are often restricted on public computers and therefore this feature won't work. If cookies are available then your preferences will affect everyone you uses this computer after you.* At any time you may revisit this screen and modify you settings.

Language settings control the language Google will display. Another option is to select the languages of the pages in the results list to display. For example you may choose to only display French language web sites in the results list.

SafeSearch Filtering options determine if Google searches will be filtered to block offensive content. Google's SafeSearch can block web pages containing explicit sexual content from appearing in search results. There are three options, strict filtering (filters both explicit text and explicit images), moderate filtering (filters explicit images only - default behavior) or no filtering.

You may choose results list settings here. There are two options, the number of results to display per page and the option to display results in a new window.

6. Language Tools

One of the lesser known tools in Google can be found here.

From here you can perform searches limited to one language only. A simple drop down menu provides a list of languages to choose from. Then run your search using the form provided.

Google provides users with tools to read web sites published in other languages. The Translation Tools section has an option to translate an entire web page. Simply type in the URL of the page you wish to see, choose the language to translate and the page will appear in English, more or less.

7. I'm Feeling Lucky

Click on this button after entering a search term and Google will not display a result list, rather Google will display the page that it feels most matches your requirements. You would have to be extremely lucky if this tool worked for you.

8. More Help

Books have been written on how to use Google searching. This tutorial only offers a brief introduction to advanced searches. [Google's help pages](#) contain a wealth of information.