

Power Searching with Google Quick Reference

How search works: Google looks for the word you typed in, but sometimes also looks for synonyms or related terms. Any words appearing in boldface type in your search results are terms Google associates with your search terms.

Ads appear in response to some queries and are always labeled ads.

Aside from ads, website owners cannot pay to influence the placement of their website in the search results.

Color filtering: Use color filtering within image search.

Click on the appropriate colored box in the left panel (does not work on iPad and Android tablets).

Use image search when it appears in search results, and use related image search to refine results.

Choose effective keywords: Remember to think about the words you think will be in your desired results page. Determine the most important words in your search as well as potential synonyms.

Word order matters. Small words (a, the) matter when they distinguish between two similar entities.

Punctuation that matters: \$, #, and + (when used as C++, Google+).

Punctuation that Google ignores: ¶, £, €, ©, ®, ÷, §, %, (), @, ?, !

Quotes: Use quotes to search for a phrase.

Quotes glue words together; there can be additional words before or after the phrase, but the phrase will always stay together in the results.

Information panels: Information about certain topics (e.g. landmarks, famous people, movies, chemical elements) appears directly on the search results page (top box on right-hand side).

Left panel: Filter results by different categories (blogs, discussions, recipes, patents, books, 3D models, scholarly sources, and legal documents).

The left panel does not appear on tablet computers (iPads and Android devices).

Find text on a page:

Windows computers: Press the Control and F keys at the same time (Ctrl-F).

Apple computers: Press the command and F keys at the same time.

Android tablets: In a browser window, touch the menu button in the top right of the screen, then select “find on page.”

Safari on iPad tablets: Click the cursor in the search box in the upper right corner of the screen. Directly above the keyboard, a “find on page” box will open.

Translate: Translate words, sentences, and pages by using <http://translate.google.com/>

Foreign language search: Search in foreign languages using English by clicking “More search tools” on the left panel of your results page, then select “Translated foreign pages.” This feature chooses the best language in which to search and delivers results translated back into English.

Math and calculations:

Enter any mathematical equation into the search box, and Google will calculate your answer.

Operators:

site: Return results from the specified site only; use also within images and news results.

[site:edu] or [site:.edu]

[site:ucla.edu]

[Jefferson site:archives.gov] or

[site:archives.gov jefferson].

filetype: Return files of the extension you specify.

NO space between filetype, the colon, and the extension. [filetype:txt] or [filetype:.txt]

other types: swf, xlsx, pdf, gif

List of file types Google indexes:

<http://support.google.com/webmasters/bin/answer.py?hl=en&answer=35287>

minus (-): Eliminate irrelevant results.

There must be a space before the minus sign.

There must not be a space between the minus sign and the word you want to eliminate.

Example: [tesla -coil]

define: Identify the meaning of words. Example: [define yarnbombing]

Also: Click on Search Tools in the left panel, then Dictionary to define words that do not appear in traditional dictionaries.

OR: Use OR to include more than one way of expressing an idea.

plus (+) is not an operator: Does not mean “and,” nor does it force inclusion of a word. Google can search for certain plus signs after a word (e.x., C++ and Google+). A plus sign before a search term, used as an operator, looks for a Google+ Page by that name.

More Ways to Search ...

Search by image: Visit images.google.com, or any Images results page, and click the camera icon in the search box. Enter an image URL for an image hosted on the web or upload an image from your computer.

See:

<http://support.google.com/images/bin/answer.py?hl=en&p=searchbyimagepage&answer=1325808>

Search by Image is supported on these browsers: Chrome, Firefox 3.0+, Internet Explorer 8+, and Safari 5.0+. To Search by Image on an Android device, use an app like Google Goggles to take a photo of an object or image. Search by Image is not currently supported on tablet browsers.

Shortcuts (search features): Google search features include weather, time, flight numbers, earthquakes, world capitals, sunrise/sunset times, movies, stock quotes, sports scores, package tracking numbers, medical conditions, and medications. Check out the [full list of search features](#). These search features are available on cell phone, iPad, or anywhere Google is available (try it on your phone while you are cooking in the kitchen).

Time/Date range: Limit results to sources published during a specific time period by clicking on Search Tools, then selecting the appropriate time range. Time filters are available in Web Search, Books, Images, News, Videos, Blogs, Discussions, and Patents.

This feature is not available on tablet browsers.

Verify the credibility of information you find on the web. **Just do one more search.**

Avoid confirmation bias when conducting searches. To verify the source of a piece of information, use the precise information you have. To confirm a fact, use a generic description for what you seek.

Example: [average length octopus] will give you information about how long an octopus is.

[18 inch long octopus] will give you sources with examples of octopuses of that length.

Search appropriate sources that offer **authoritative information** for the type of information you are trying to find.

WHOIS: Query to identify the owner of a website.

The US Chamber of Commerce operates the WHOIS search available at <http://www.internic.net/whois.html>; alternative WHOIS registries also exist.

If you see a second company listed as a contact on the WHOIS page, then a relationship exists between the two companies; search to determine that relationship. Example: [whois] finds WHOIS registries you can use. Find the search box for the registry, and enter [zagat.com]. See that Google is the registrant. Search for [google zagat], which leads to the information that Google acquired Zagat.

If you don't know a company's website, you can search for the company's name in Google and locate the web address.

Search strategies:

Sometimes search results offer information that suggests a better or additional search.

Refine results by using different media types such as videos and news; these filters appear at the top of the search results page

Combine operators for stronger searches.

Operators can be placed anywhere in the query; the order does not affect the results. For example: [black cats site:com] is equivalent to [site:com black cats].

Combine methods and approaches to find information efficiently.

Use tools that are not traditionally used for research, such as Maps and Streetview.

(On tablets, it's best to use the Google Maps application instead of looking at Street View in the browser.)

To keep updated on Google Search:

Pick a blog to read to keep up-to-date:

- [Official Google Blog](#)
- [Inside Search](#)
- [SearchResearch](#) (by Dan Russell)
- [MindShift](#) (by Tasha Bergson-Michelson)
- [Search Engine Land](#)

Set up [an email alert](#) to notify you when there is a new Google Search feature.

Try out the [AGoogleADay](#) game.

Advanced Power Searching Skills Quick Reference

Follow a process for conducting advanced research:

Articulate the goals of your research (information need)—you may not know what the goals are (or they may change along the way). Break your question into steps (chain): identify the pieces and a logical order; write appropriate queries for each step.

Plan to learn along the way. Start broadly and narrow down. Generate a list of resources to check.

Track your progress using online resources like Google Docs or offline resources like a piece of paper.

Know when to stop.

Use advanced search to find pages written in a particular language:

Search by a country's Google instance (e.g. Google.co.in). Use translated foreign pages. Use search settings to set a level of filtering, turn on/off search-as-you-type, set the number of results shown, block unwanted sites, and choose whether or not to personalize results.

Use advanced search to locate content (including images and videos) that you can **legally re-use**.

Use search settings to set a level of filtering, turn on/off search-as-you-type, set the number of results shown, block unwanted sites, and choose whether to personalize results or not.

Use double-quote and verbatim mode in the left panel to search using the exact keywords you type.

Use advanced search to search websites from a specific country; set "region" in the left hand panel to search as if you were in a particular location.

Use Google Maps to research locations: Install and use the lat/long tool in Google Maps to identify and use the latitude and longitude of a location. Measure distance in Google Maps. Use * in Google Maps (web and mobile) to get a list of businesses and placemarks near a location.

Filter image results to locate faces, images of particular sizes, and similar images.

Use Google Scholar to identify published articles: specify where words appear, author names, sources, and publication dates. For published authors, receive Updates personalized to your published research. Set an Alert in Google Scholar to be notified when new journal articles are published.

Use the Legal part of Google Scholar (in English-speaking countries) to read court opinions and legal literature.

Use Google News and the News Archive search to locate newspaper and news blog articles.

Use Patents in the left navigation panel to locate American and European patents and investigate prior art.

Use Book search as a research tool: Filter by publication date. Use Book search to identify metadata and unusual things in books; the first few pages of a book scan often have interesting data, such as who donated, what library it is from, common phrases. Use Book search to locate books for download or in local libraries.

Use web history to revisit previously found pages you have found previously.

Use context terms to find specific types of sources; Use context terms (e.g. database, archive) to find data collections; Use context terms (e.g. diagram, DIY, MSDS, lesson plans, album) to describe what will be written on a page.

Use advanced operators: The number range operator; wildcard (*), AROUND, or related:.

Combine search operators.

Use a reverse dictionary to identify unfamiliar words and synonyms.

Use the language appropriate to the author's social and historical context (synonyms); NGRAM viewer.

Use boilerplate language to locate relevant content.

Recognize and use the structure of sites and web pages and use queries that help you identify them. (inurl:, intitle:, site:)

Put together pieces of what you find on the web: Fusion tables, Analyzing data-able search

Use people (online and offline) as resources to help identify information.

Apply search strategies: Specialization and generalization; comparing multiple sources.