

GOOGLE FOR RESEARCH: Tips & Tricks for Expert Searching

KEEP IT SIMPLE	GOOGLE SEARCH CONVENTIONS	NOTES
Use lower case letters.	The Google search engine is not case sensitive.	Exception , when using the OR operator (see below)
No need to be too specific	If you need a pizza place nearby, use this to search: <i>Pizza places nearby</i>	Google search will grab your location and deliver a variety of results about pizza places that are near you
Leave out punctuation.	Google ignores most punctuation marks and symbols.	Exceptions: dollar signs when used to indicate price; symbols when used to convey meaning such as a program language (C++) or musical term (G#).
No need to connect terms with AND. Word order matters.	Google's relevancy ranking puts results that contain all the search terms toward the top of the results list. Google ranks the first word slightly higher than the second one, and soon.	The Boolean AND does not function in Google as it does in many database and search engines. AND is assumed between words.
Enter search terms in singular forms.	Through a process called stemming, Google automatically tries to find all forms of words.	Word truncation does not function in Google. If not all word variants are retrieved, connect word with OR (see below). Example: diet returns: diet, diets, dietary, dietician
Use the tabs	Usually you will see Web, Image, News, and More.	Using these tabs, you can help define what kind of search you need to do
Use words that websites would use	When searching, try to use terminology you would find on a professional website. This will help you get results that are more reliable.	"I have a flat tire" could be replaced by "repair a flat tire." "My head hurts" could be replaced by "headache relief."

OPERATOR	FUNCTION	NOTES	EXAMPLE
OR	Searches for either term.	Excellent strategy to retrieve results for synonyms or words that are closely related in meaning. OR must be capitalized. Broadens your search.	avian OR bird
~	Use the tilde (~) to find words with similar meanings.	Does not work consistently for all words. Broadens your search.	"highway safety" ~elderly (will find seniors, senior citizens, and older drivers also)
()	Craft a search formula - enclose each concept in parentheses, with OR connecting similar words.	Google searches for the terms within the parentheses first before combining with terms outside the parentheses.	(flu OR influenza) (avian OR bird) (outbreak OR incidence OR case)
“ ”	Enclose multiple words in quotation marks to search those exact words in that exact order.	Phrase searching works well for names, titles, and terms that include multiple words.	."global warming" OR "climatechange"
-	Exclude words from results.	Can also be used to exclude domains, e.g. -site:edu . (Do not leave a space after the minus sign.)	.football -soccer -rugby .violin music +sonata -concerto
*	Use the asterisk to fill in the blank if the intervening word is unknown.	When you use an asterisk in a search term on Google search, it will leave a placeholder that may be automatically filled by the search engine later.	."george * * bush" ."obama voted * on the * bill"

..	Search within a range of numbers (dates, costs, measurements)	If interested in money or statistics, this tip is particularly useful. Essentially, you use two dots and a number to let Google search know you are looking for a specific range of numbers Note: The two dots with only one number will tell the search that you do not need anything before or after the specified number	."science milestones" 1910..1920 .\$250..\$500 laptop .What teams have won the Stanley Cup ..2004
intext:	Restrict results to pages that have the query word or phrase in the body of the document.	To Find Specific Title, Text on Site easy this trick. Ex: Find those pages whose titles are "Agile", text of the page is scrum and find on yodiz.com site only: <i>intext:scrum intitle:Agile site:yodiz.com</i>	.intext: "grant funding" .intext:"society of neuroscience"
intitle: allintitle:	Restrict results to pages that have the query word or phrase in the title of the document	No space between intitle and the colon. Finds results with your search term in the document title. Allintitle: finds results with all your search terms in the document title	.2009...2014 intitle:Toyota recall
site:	Search only one website or only onedomain.	Common domains included edu, com, org, gov, country codes (uk, ca, ke, etc.)	Volunteer opportunities Boston site:org
filetype:	Restrict search to a specific file type.	Google search has the ability to search for a specific file or file type.	IRS tax forms filetype:pdf
define:	Searches for definitions of words from various web sources.		define: combinations define: passive voice
link:	Find linked pages – show web pages that point to a particular URL/website.	If you want to see who cited a New York Times article on their site, you will use this trick to find all the sites that link to it.	link:nytimes.com
related:	Search for similar or related web pages.	Let us say you have a favorite website. It can be anything. However, that website is getting a little bit boring and you want to find other websites like it	related:cdc.gov
cache:	If you want to search any site cache	If the page is no longer existing you can search for the cache (old version cached in Google)	cache:http://www.globalguideline.com/

Specialized Google Search Engines

Name	what it searches	tips	url
Google Scholar	Scholarly journals, books, conference proceedings, reports.	Connect your link resolver to Scholar citations: http://scholar.google.com/intl/en/scholar/libraries.html	http://scholar.google.com/
Google Book Search	Searches the full text of books scanned by Google.	Click on "Find this book in a library" to see which libraries own the book via Open WorldCat.	http://books.google.com/books
Google U. S. Government Search	Web sites published by federal, state and city government in the U. S. A.	Use this to find information on legislation, statistics, demographics and more from government sources.	http://www.google.com/unclesam
Google Patents	Includes the full text & drawings of all U. S. patents starting in the 1790s.	Use the Advanced Patent Search screen. Great for certain kinds of historical research.	http://www.google.com/patents
Google News	Aggregates articles from newspapers & other news publications from all over the world.	Try personalizing the page or creating news alerts on topics.	http://news.google.com/

Google search shortcuts (commands)

Several commands can be entered to give you instantaneous results. This can save time and effort, so you do not have to click a bunch of bothersome links.

Here are a few examples of some commands you can enter into Google:

- **Weather *zip code*** – This will show you the weather in the given zip code. You can also use town and city names instead of area codes, but it may not be as accurate if there are multiple area codes in the city.
- **What is *celebrity name* Bacon Number** – This is a fun little one that will tell you how many connections any given celebrity has to famed actor Kevin Bacon. The popular joke, Six Degrees of Kevin Bacon, is that no actor is more than 6 connections away from Kevin Bacon. Mark Zuckerberg has a Bacon Number of 3.
- **The math example** Google can do some math for you; it will also show a calculator that you can use to find answers to more questions. It can help you solve math problems by showing values for known mathematical terms. It will not solve all math problems, but it will solve a good number of them
- **What is the definition of *word* or Define: *word*** – This will display the definition of a word.
- **Spell numbers with [number]=English:** How do you spell out 6,546,345,645? Google can tell you if you search : **6,546,345,645=English**
- **Time *place*** – This will display the time in whatever place you type in.
- **Sunrise and Sunset:** Want to know when the sun will rise or set in your neck of the woods? Search sunrise or sunset and Google will give you the answer based on your device's current location. You can also search for the sunrise/sunset times for other locations, as well.
- **Weather:** Find out the weather in your area by typing weather. Autocomplete will likely give you today's current forecast as you type, but a full search will present an interactive card with weather information for the location of your IP address, courtesy of The Weather Channel. If you're traveling or just want to know what it's like elsewhere, search weather [any location], e.g. weather Toledo, OH
- You can **check any stock by typing its ticker name** into Google. If you search for *GOOG*, it will check the stock prices for Google by typing: *goog stock price today*. *GOOG* (for Alphabet), *AAPL* (for Apple), or *AMZN* (for Amazon).
- **Check Flight Time:** If you're headed to the airport or picking up a loved one, type in a flight number and Google will return a card with up-to-date times and terminal/gate information. If you're looking to book a flight, check out Google Flights (Opens in a new window) to find the cheapest flights online.
- **Timer:** Search timer to get a five-minute timer (or stopwatch to time something). To change the amount of time, click and enter your desired time. Press Start. The countdown will continue even if you navigate to a new tab; you'll get a warning if you try to close the tab with the timer by accident. The remaining time will show on your browser tab; once it's up, an alarm will sound and the tab will display an hour-glass icon until you click OK to silence it.
- **Money and unit conversions** Google search can quickly and accurately convert both measurement units and currency value.
 - **Miles to km** – This will convert miles to kilometers. You can put numbers in front to convert a certain number. Like “10miles to km” will show you how many kilometers are in 10 miles.
 - **USD to British Pound Sterling** – (or by typing: **\$ £ conversion**): This will convert a US dollar to British pounds. Like the measurements above, you can add numbers to find exact conversions for a certain amount of money
- **Track your packages:** use Google search to find out where your packages are. You can enter any UPS, USPS, or FedEx tracking number directly into the Google search bar, and it will show you the tracking information about your package.

File types indexable by Google

Google can index the content of most text-based files and certain encoded document formats. The most common file types we index include:

Adobe Portable Document Format (.pdf)

Adobe PostScript (.ps)

Comma-Separated Values (.csv)

Google Earth (.kml, .kmz)

GPS eXchange Format (.gpx)

Hancom Hanword (.hwp)

HTML (.htm, .html, other file extensions)

Microsoft Excel (.xls, .xlsx)

Microsoft PowerPoint (.ppt, .pptx)

Microsoft Word (.doc, .docx)

OpenOffice presentation (.odp)

OpenOffice spreadsheet (.ods)

OpenOffice text (.odt)

Rich Text Format (.rtf)

Scalable Vector Graphics (.svg)

TeX/LaTeX (.tex)

Text (.txt, .text, other file extensions), including source code in common programming languages, such as:

Basic source code (.bas)

C/C++ source code (.c, .cc, .cpp, .cxx, .h, .hpp)

C# source code (.cs)

Java source code (.java)

Perl source code (.pl)

Python source code (.py)

Wireless Markup Language (.wml, .wap)

XML (.xml)

Google can also index the following media formats:

Image formats: BMP, GIF, JPEG, PNG, WebP, and SVG

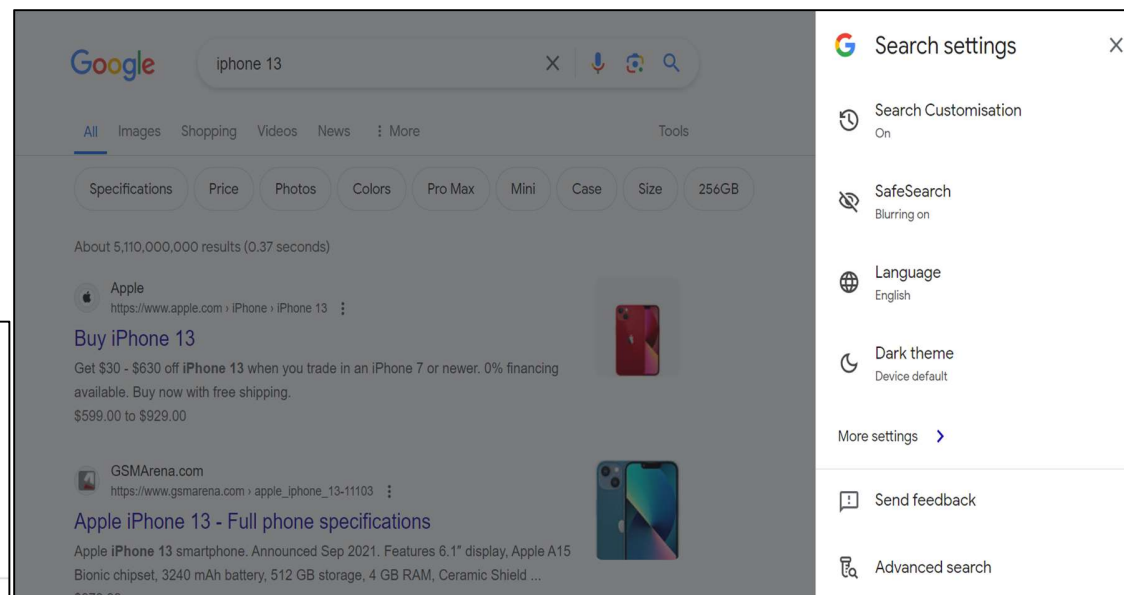
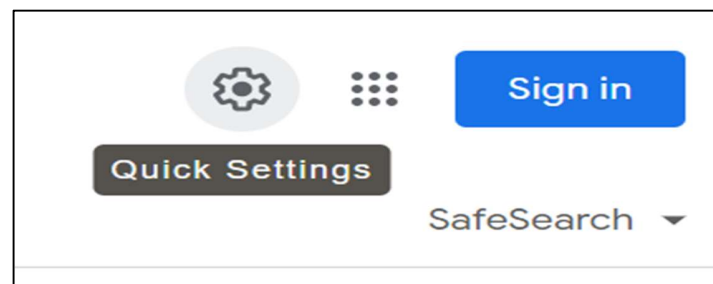
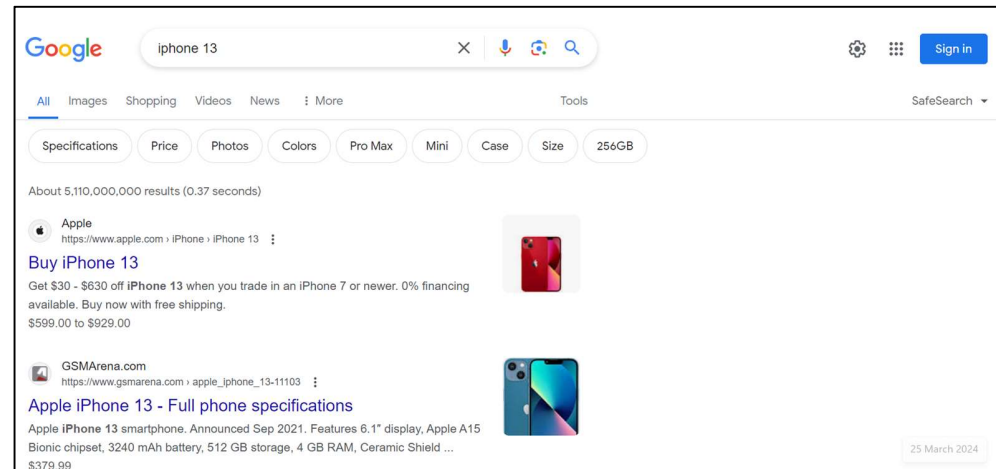
Video formats: 3GP, 3G2, ASF, AVI, DivX, M2V, M3U, M3U8, M4V, MKV, MOV, MP4, MPEG, OGV, QVT, RAM, RM, VOB, WebM, WMV, and XAP

Advanced Search

You can use all properties in an advanced Google search. From the Google results page, click the gear icon and choose **Advanced search** to open a new advanced search page.

This feature allows you to enter keywords or phrases in specific fields instead of relying on specific modifiers. Results can be narrowed even further by language, region, last update, domain, term location, explicit content, file type, and usage right. Image searches can also be narrowed by image size, aspect ratio, color, and image type.

While you can't create an advanced search on mobile, you can filter your image search. Tap the slider icon at the top of your image search to filter by most recent, GIF, HD images, images of products, color, and usage rights.



Advanced Search

Find pages with...

all these words:

this exact word or phrase:

any of these words:

none of these words:

numbers ranging from:

to

To do this in the search box

Type the important words: tricolor rat terrier

Put exact words in quotes: "rat terrier"

Type OR between all the words you want: miniature OR standard

Put a minus sign just before words you don't want:
-rodent, -"Jack Russell"

Put 2 periods between the numbers and add a unit of measure:
18..35 lb, \$300..\$500, 2018..2011

Then narrow your results by...

language:

any language

Find pages in the language you select.

region:

any region

Find pages published in a particular region.

last update:

anytime

Find pages updated within the time you specify.

site or domain:

Search one site (like wikipedia.org) or limit your results to a domain like .edu, .org or .gov

terms appearing:

anywhere in the page

Search for terms in the whole page, page title, or web address, or links to the page you're looking for.

SafeSearch:

Show explicit results

Tell SafeSearch whether to filter sexually explicit content.

file type:

any format

Find pages in the format you prefer.

usage rights:

not filtered by license

Find pages you are free to use yourself.

Advanced Search

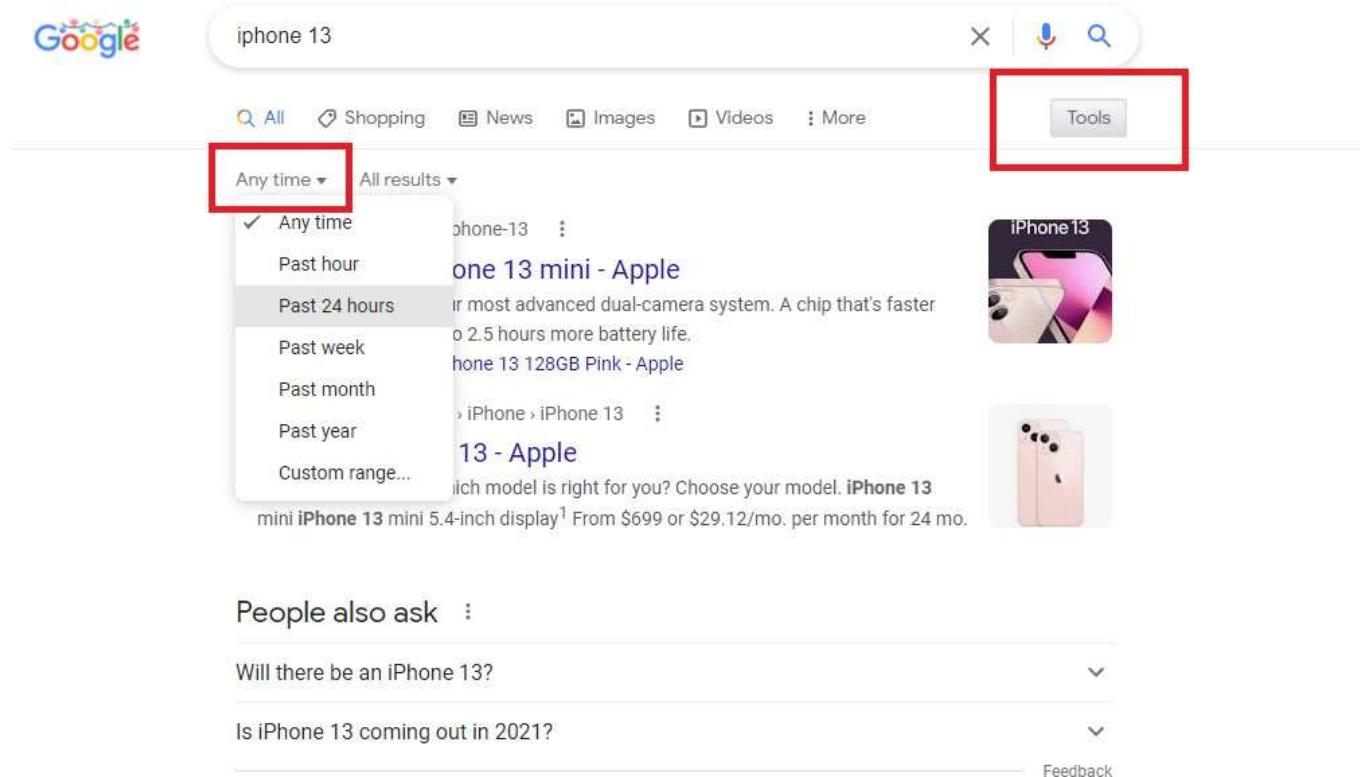
Google Tabs

The screenshot shows a Google search for "adventure tourism". On the left, a dropdown menu is open, showing options: "Any time" (checked), "Past hour", "Past 24 hours", "Past week", "Past month", "Past year", and "Custom range...". Below it, another dropdown menu is open, showing "All results" (checked) and "Verbatim". On the right, a box contains the text "Link to a cached copy of this site where your search terms are highlight." with an arrow pointing to a "Cached" link in the search results. The search results include "Adventure Travel Site - Expeditions.com", "Diploma of Adventure Tourism Management - Courses ...", "Gorillas Gameparks Beach", "Travel & Tourism Courses", "Happy Valley Adventures", and "Adventure Tourism".

Set Time Restraints

Looking for only the latest news about a subject or trying to find information relevant to a specific time frame? Use Google's search tools on desktop and mobile to filter your search results. When on desktop, click **Tools** under the magnifying glass icon. On mobile, swipe to the end of the list of Google search types and select **Search tools**.

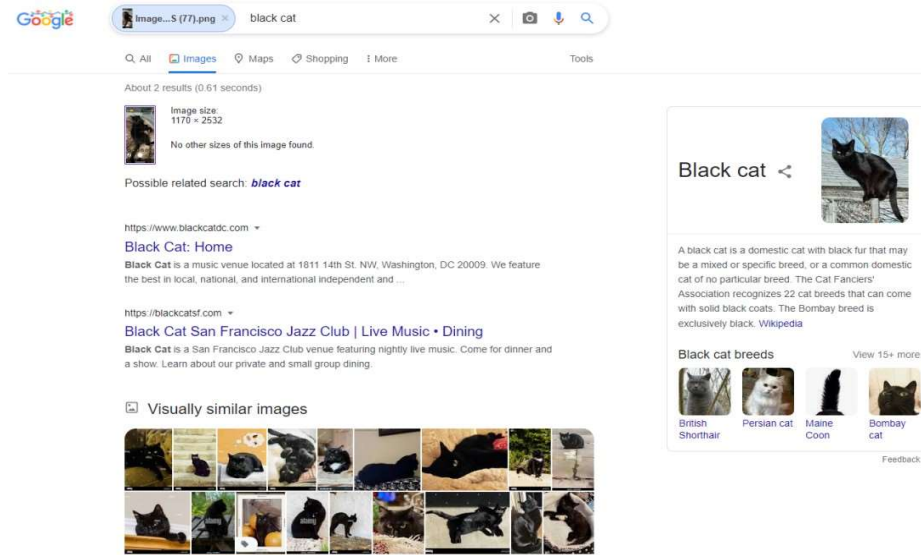
Select **Any time** to open a drop-down menu that can help you narrow results to the past hour, 24 hours, week, month, and year. Desktop users can select **Custom range** to enter specific dates



The screenshot shows a Google search interface for the query "iphone 13". The search bar contains the text "iphone 13" and has a "Tools" button highlighted with a red box. Below the search bar, navigation tabs for "All", "Shopping", "News", "Images", "Videos", and "More" are visible. A dropdown menu for "Any time" is open, showing options: "Any time", "Past hour", "Past 24 hours", "Past week", "Past month", "Past year", and "Custom range...". The search results for "iphone 13" are displayed, including a featured snippet for "iPhone 13 mini - Apple" and a product card for "iPhone 13 128GB Pink - Apple". Below the search results, the "People also ask" section is visible, with questions like "Will there be an iPhone 13?" and "Is iPhone 13 coming out in 2021?". A "Feedback" link is located at the bottom right of the page.

Reverse Image Search

Google supports "backward" image searches on most browsers. This function allows you to upload an image file and find information on that image. For example, if you uploaded a picture of the Eiffel Tower, Google will recognize it and give you information on the Paris monument. It also works with faces, and can direct you to websites where the image appears, identify a work of art, or show you images that are "visually similar." Go to Google Images and just drag and drop an image into the search bar. You can also click the camera icon to upload an image or enter an image's URL. (Here's how to do a reverse image search on your phone.)

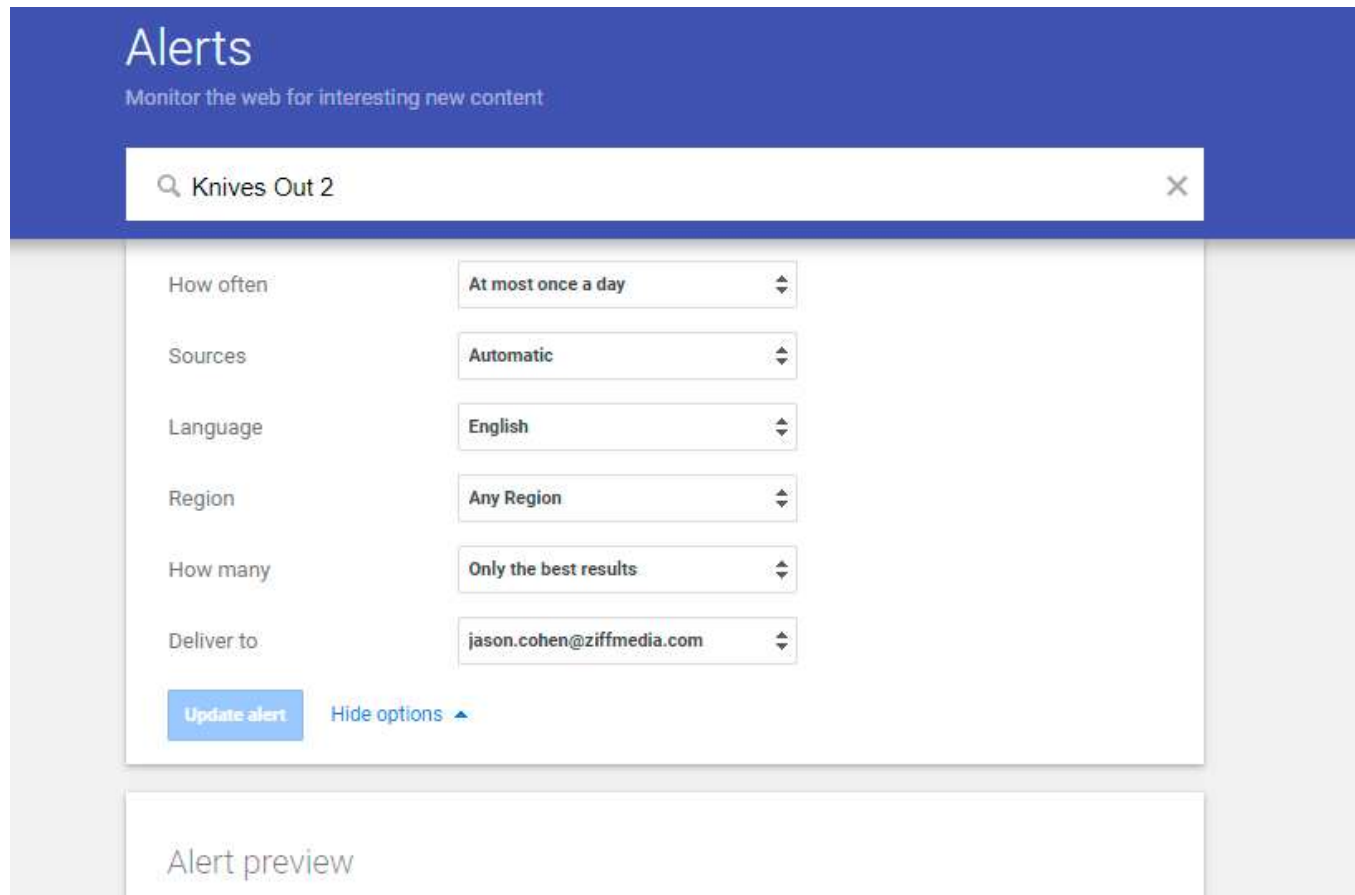


The screenshot shows a Google search interface with a reverse image search performed. The search bar contains the text "black cat" and a small thumbnail of the image being searched. Below the search bar, the results are displayed in two columns. The left column shows a small thumbnail of the image, its size (1170 x 2532), and a note that no other sizes were found. Below this, there are links to "Possible related search: black cat" and two website results: "Black Cat: Home" (a music venue in Washington, DC) and "Black Cat San Francisco Jazz Club | Live Music • Dining" (a jazz club in San Francisco). The right column features a larger image of a black cat with the text "Black cat" and a left arrow. Below the image is a definition: "A black cat is a domestic cat with black fur that may be a mixed or specific breed, or a common domestic cat of no particular breed. The Cat Fanciers' Association recognizes 22 cat breeds that can come with solid black coats. The Bombay breed is exclusively black. Wikipedia". Underneath the definition is a section titled "Black cat breeds" with four small images and labels: "British Shorthair", "Persian cat", "Maine Coon", and "Bombay cat". A "View 15+ more" link is also present. At the bottom of the right column is a "Feedback" link. At the bottom of the left column, there is a "Visually similar images" section with a grid of 20 small images of various black cats.

Create a Google Alert

If you want to be notified whenever a keyword is published on the web, create a Google Alert(Opens in a new window). Add topics to track, then customize the alert by determining how often you should be notified, what sources, language, and region should be included, how many results will be shown, and to what email address it should be delivered.

A preview will show you what the alert will look like with existing stories already indexed by the Google. From the main Alerts screen, you can manage all your results by having them sent at a certain time or all in one email.



The screenshot shows the Google Alerts creation interface. At the top, there is a blue header with the word "Alerts" in white and the subtitle "Monitor the web for interesting new content". Below the header is a search bar containing the text "Knives Out 2" and a clear button (X). The main content area is a white box with a light blue border, containing several settings:

- How often:** At most once a day
- Sources:** Automatic
- Language:** English
- Region:** Any Region
- How many:** Only the best results
- Deliver to:** jason.cohen@ziffmedia.com

At the bottom of the settings box, there is a blue "Update alert" button and a "Hide options" link with a small upward-pointing triangle. Below the settings box is a section labeled "Alert preview".

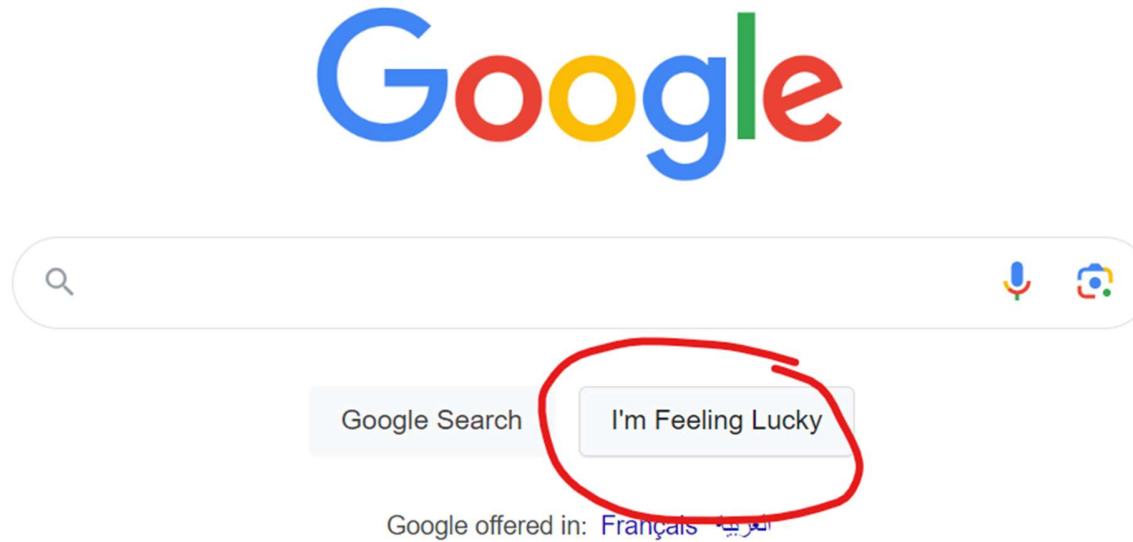
Safe Search (Filter Explicit Content)

Have a kid using the computer? Protect them from explicit content with Google's SafeSearch feature (Opens in a new window). From a search results page, click the gear icon on the top right and toggle the Explicit results filter option to on. Though Google admits, it is not 100% accurate, it has intended to filter out explicit links, images, or video that may be deemed inappropriate for an all-ages audience. For a more robust solution, check out our picks for the Best Parental Control Software.

The image shows a Google search interface for 'iphone 13'. The search bar contains 'iphone 13' and the Google logo is on the left. On the right, there are icons for settings, a grid, and a 'Sign in' button. Below the search bar, there are tabs for 'All', 'Images', 'Shopping', 'Videos', 'News', and 'More'. A 'Tools' button is also visible. A horizontal filter bar contains buttons for 'Specifications', 'Price', 'Photos', 'Colors', 'Pro Max', 'Mini', 'Case', 'Size', and '256GB'. Below the filter bar, it says 'About 5,110,000,000 results (0.42 seconds)'. The first search result is from Apple, titled 'Buy iPhone 13', with a sub-headline 'Get \$30 - \$630 off iPhone 13 when you trade in an iPhone 7 or newer. 0% financing available. Buy now with free shipping.' and a price range of '\$599.00 to \$929.00'. The second result is from GSMArena.com, titled 'Apple iPhone 13 - Full phone specifications', with a sub-headline 'Apple iPhone 13 smartphone. Announced Sep 2021. Features 6.1" display, Apple A15 Bionic chipset, 3240 mAh battery, 512 GB storage, 4 GB RAM, Ceramic Shield ...' and a price of '\$379.99'. On the right side, a 'SafeSearch' dropdown menu is open, showing options: 'Filter explicit results', 'Blur explicit images' (checked), and 'Off'. There is also a link for 'More about SafeSearch'.

I'm Feeling Something Else

Remember Google's "I'm Feeling Lucky" button? On Google.com, type in a search term and click I'm Feeling Lucky to be immediately taken to the first search result. It's a good way to save time when you know exactly what you're looking for. However, Google added a new wrinkle that can help you find something else. Before you type anything into Google, hover over the I'm Feeling Lucky button and the wording will change. It may change to "I'm Feeling Adventurous," which will provide you with a coin to flip. "I'm Feeling Hungry" will Google nearby restaurants. "I'm Feeling Trendy" will show you recent Google trends. Every day there are new suggestions with different results.



Fun facts:

Engineers like to have fun, too, and on Google, there are a number of search-related Easter eggs. Here are a few words or phrases to search if you want a little surprise:

- **Wordle:** Capitalizing on the current Wordle phenomenon, Google wordle for a logo inspired by the web game on the top left.
- **Anagram:** Google will ask if you meant "Nag A Ram."
- **Define anagram:** Google will ask if you meant "nerd fame again."
- **The answer to life the universe and everything:** The answer is 42.
- **Askew:** Your screen will tilt.
- **Bletchley Park:** Google will decode the name under the Google Maps card.
- **Blink HTML:** The words "HTML" and "blink" will blink on the search page.
- **Do a barrel roll or z or r twice:** The screen will do a 360.
- **Festivus:** A Festivus pole is added to the left side of the screen.
- **Google in 1998:** Google will look like it did from back in the day.
- **Google logo history:** Take a tour through the different iterations of the Google logo.
- **Marquee HTML:** The number of search results will be displayed as a marquee sign.
- **Recursion:** Google will ask if you meant "recursion."
- **Sonic the Hedgehog game:** An animated sprite of Sonic will appear in the search card. Click him for a surprise.
- **Super Mario. Bros. 1985:** An animated sprite of a coin block will appear in the search card. Click it to grab a coin.
- **Webdriver torso:** The Google logo will turn into colored blocks.