

PART I: Terms and Definitions

Internet

The Internet is a network of networks, the total number of all computers that are connected to each other throughout the world by cable, telephone wire, wireless and/or satellite systems. It is the highway on which traffic to and from computer systems travels.

World Wide Web

The World Wide Web is all the linked web content (pages, files, documents) that exists across all networked computer systems.

Browser

A browser is a program that allows you to find and access content on the World Wide Web. It uses the Internet to request and receive information and content. Examples of popular browsers include Internet Explorer, Safari, Firefox, Chrome and Opera.

Search Engine

A search engine is a program that indexes pages, documents and files on the World Wide Web, and presents these in a specific order according to a 'query' or search command that is entered. Google and Bing are the most popular. DuckDuckGo promises no tracking.

Internet Service Provider (ISP)

An ISP is a company that provides users with access to the internet through a subscription payment schedule. Examples of ISP's include TELUS, Bell, Rogers, Shaw, AT&T and Verizon.

Uniform Resource Locator (URL)

A URL is a specific character string that constitutes a reference to a resource. In most web browsers, the URL of a web page is displayed on top inside an address bar.

PART II: Safety Tips

Virus Protection Software

This is specialized software designed to identify and block dangerous sites. Here's a site that offers reviews of anti-virus software: <http://anti-virus-software-review.toptenreviews.com/>

Keep Up To Date

Don't ignore a notification that a new update is available for your browser, your operating system, and especially, your virus software. As threats are identified, software companies revise their products to block that threat. You need the update to be safe.

Email Links

Don't open email links if you don't know what's in them or who they're from. This is a prime way for defenses to be overcome. If your bank sends you a link, be suspicious. Go to the bank site by Googling their name, rather than by using such a link.

Passwords

Don't use the same password for everything. If there is a breach at a place you've used that password, then you're vulnerable everywhere else. Make your password as long as is reasonably possible, and don't make it easy (like your name or date of birth). One strategy is to use the first letters of each word in a favourite phrase.

Secure Sites

Financial (and some other) sites use encryption, so if any communication is intercepted, it is gibberish. Secure sites have the prefix "https" (the "s" stands for "secure") and usually have a lock symbol in the URL bar.

Personal Information

Be careful with what you put out there. Use the privacy features on sites like Facebook. Do a Google search on yourself occasionally to see what information about you is readily available.

PART III: Searching with Google

The world's most popular search engine, Google has a number of special features that make it effective. Here's a video on how it's done: www.youtube.com/watch?v=BNHR6IQGZs

Here are some Google searches to practice with. Go to www.google.ca and try the underlined search terms.

Simple Searches

Often a simple phrase search will give you adequate results. Type in Canucks

- Did you notice that Google offered you some search options as you typed?
- Is there any advertising on the results page? How can you tell what is an ad?
- Note the topic summary on the right side of your results screen. This is a new Google innovation with info gathered from (and linked to) the web
- Look at the first result item below the ad. Google thinks this is the most likely thing your search term is looking for.
- Scroll down to some results. Identify the web address; what does the domain name tell you about the type of information you'll get from that results link?
- Now try find the site referred to earlier about anti-virus software. It was a site that offers top ten reviews on various products. What is your search term? Are there ads in your results list?
- Try the name of your bank. The web address – particularly for any web page that has personal information on it – should show a prefix of "https" because it is a secure, encrypted site. A lock symbol is usually in the URL bar as well.

Exact Word Searching

For exact word searching, use quotation marks. Try the following:

- necessity is mother's invention – how many results?
- "necessity is mother's invention" – how many results?

Now try searching for your name to see what personal information is out there on you:

- Try with and without quotation marks – does any information come up on you?
- Try typing in your home address. What comes up?
- Try typing in your phone number. This strategy might work if you get a strange call: jot down the number and then Google it.

Site Specific Search

Sometimes you only want results from one source. For a Google site-specific search, the format is site:domain (no space).

- Try translink:vancouversun.com (all results will be from the Vancouver Sun site, and will be related to TransLink)
- Use this same technique to search within a website that is vast or poorly organized. The top level domain of the BC Government is gov.bc.ca. Try search for immigration within the BC Government site only

File Type Search

Maybe you only want results that are a certain file type (for example, pdf, or jpg.). For a Google file type specific search, the format is filetype:xxx (no space).

- Try north Vancouver community plan filetype:pdf
- Jpg is a picture format. Search for a jpg image of the library

Google Calculator

You can use your Google search bar to do math calculations. The basic math operators are **+** (addition), **-** (subtraction), ***** (multiplication), **/** (division), and **% of**. Google also provides conversions of measurements like grams to pounds

- Try 7500 * 40 or 15% of 200
- Try 27 litres in gallons or 4 tbsp in cups

Word Definitions

Google can act as your online dictionary too. Just type define and then the word.

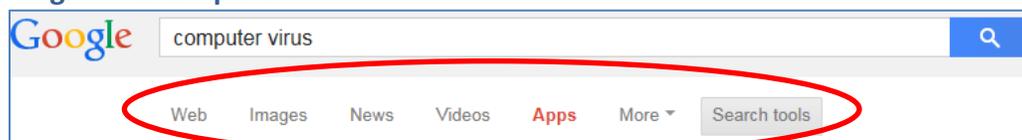
- Try define synchronicity

Image Search

Google has an amazing image search feature. Click on the word **Images** at the top right of your Google search home page.

- Try typing in your name to see if there are any images of you out there.
- Try searching for someone you know
- Try funny cats

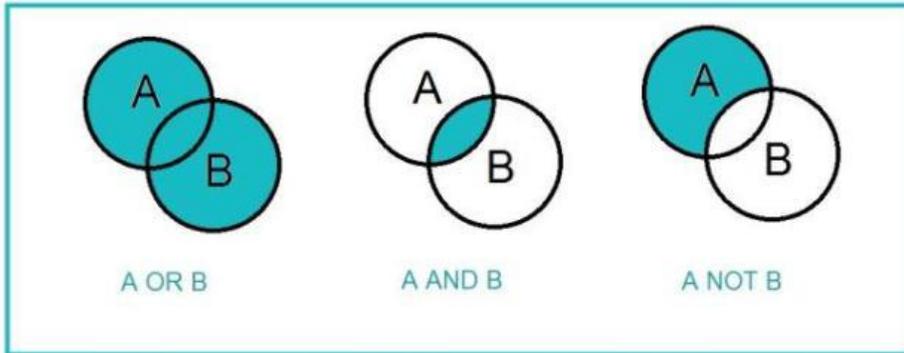
Other Google Search Options



- Type in computer virus, then explore the different types of results you get from each of the options listed below the search bar: Web, Images, News, Videos, Apps, More, and Search tools.
- Try the same strategy with the search term library. Note the options difference

Boolean Operators

Use Boolean logic to fine-tune results (an important concept in digital search):



- With Google, OR must be capitalized. Vancouver OR Canucks returns sites about Vancouver tourism, as well as Canuck in the sense of slang term for French Canadians, as well as the hockey team. Try doughnuts OR donuts
- With Google, AND is assumed with phrase search. Searching for Vancouver Canucks will return results with both words, generally in close proximity
- With Google NOT is indicated by the minus sign. It must be immediately next to the term to be excluded. Vancouver -Canucks would give sites about Vancouver, but not about Vancouver’s hockey team. Try Vancouver Washington, and compare your results list to Vancouver Washington -Canada

PART IV: Beyond Google

The Internet is huge! There is so much to explore:

- **Bing** (www.bing.com): Microsoft’s search engine is marketed as a ‘decision engine.’ Try out some searches and compare to a Google results list
- **DuckDuckGo** (<https://duckduckgo.com/>) is a search engine that does not track you. It’s great for privacy reasons, but of course your results list won’t be informed by your historical search preferences
- Other useful sites to explore: **Amazon**, an online bookseller (www.amazon.ca); **Government of Canada** (www.canada.gc.ca); **Internet Movie Database** (www.imdb.com); **Wikipedia**, an online encyclopedia (www.wikipedia.org); **North Vancouver City Library** (www.nvcl.ca)

PART V: Learn More

There are lots of resources to explore.

Library Resources

Google **North Vancouver City Library**, or type **nvcl.ca** in the URL bar

- Click on **Using the Library**, then on **Technology Training** (under Services), and **Computer Classes**. Scroll to **Intro to Internet**, then click on **Class Resources**. Explore the options!
- Try a tutorial on **Lynda.com**, FREE from the library website: www.nvcl.ca > **Research & Learn (tab, centre top)** > **Databases A-Z** > **Lynda.com**. Try “Up and Running with the Chrome Browser” or “Up and Running with the Firefox Browser”
- Look for books on the third floor at Row 26, Dewey 004.678
- Set an appointment with a Tech Connect staff member by calling 604 982 3941 or emailing techconnect@cnv.org

Other Resources

- Check out Google Guide: www.googleguide.com
- Do a Google MOOC (Massive Open Online Class):
www.powersearchingwithgoogle.com/course/ps/course.html
- Access free online tutorials <http://www.gcflearnfree.org/internet101>