

Web Search Skills/Strategies

1. **Subject Directories**
2. **Search Engines (and Meta-Search Engines)**
3. **Keyword**
4. **Boolean Logic**
5. **Preparing Your Search**

1. **Subject Directories:** “Portal” sites, such as Yahoo, have a pre-prepared catalog of sites organized into subject “trees” which branch out into more specific categories. To find the home page of the Pittsburgh Penguins, for example, you branch from

Recreation & Sports

Sports

Hockey

Ice Hockey

Teams or National Hockey League (NHL)

National Hockey League (NHL)

Pittsburgh Penguins

And from there you have to decide “which” home page you want.

2. **Search Engines:** Some *Subject Directory* sites with subject trees are also *Search Engines*. These rely on computer programs called “spiders” or “robots” to continually crawl the web and log the words found on each page. Typing “keyword(s)” into the “Search” box returns a file with links to all the pages in the world containing the word or words. **Meta Search Engines:** Multiple/Meta tools do not maintain a directory nor crawl the web for results. Instead, they pass on your search requirements to *other Search Engines*

3. **Keywords** and 4. **Boolean Logic:** Because results can often be quite large, it is important to be able to apply techniques that move the most relevant pages to the top of the list.

Identify Keywords: break down the topic into concepts. To find what the FCC has to say about the wireless communications industry, keywords might be:

FCC

wireless

communication

Boolean AND: connecting the words with AND retrieves pages containing ALL the words:

FCC AND wireless AND communication

It will not find ONLY wireless nor only FCC nor only communication.

Boolean OR: connecting the words with OR retrieves pages containing ALL the words, but also ANY of the words. Use parentheses around the terms.

(FCC OR wireless OR communication)

Boolean AND NOT: connecting the words with AND NOT retrieves pages containing ONLY the first term, eliminating the others from the search.

FCC AND NOT wireless AND NOT communication

Would eliminate “wireless” and “communication” and retrieve ONLY FCC pages without those terms. Useful when a keyword has multiple meanings:

Saturn AND planet AND NOT car AND NOT automobile

Implied Boolean + and - : Many Search Engines will ALLOW the use of PLUS (+) in place of AND and minus (-) in place of AND NOT. Some, like GO and AltaVista, **require** + or -. The absence indicates OR. Use the +/- ahead of the term.

+Saturn +planet -car -automobile is the same as

Saturn AND planet AND NOT car AND NOT automobile

+Saturn planet -car -automobile is the same as

Saturn OR planet AND NOT car AND NOT automobile

Phrase Searching: Surrounding a group of words with quotation marks turns the words into a single set.

“FCC licenses”

Combining “Phrase Searching” with “Boolean ...” :

“FCC licenses” AND NOT “wireless communication”

5. Preparing Your Search: A few minutes clarifying exactly what you’re looking for increases your chances of finding it.

A. What do you want to find?

I want to know when Monarch butterflies migrate

B. Identify keywords:

Monarch butterflies migrate

C. Select synonyms and word variations:

butterfly migration

D. Combine words, synonyms, variants in Boolean Logic:

(Monarch OR butterfly OR migrate)

Monarch AND “butterfly migration”

E. Check spelling:

butterflie