Searching Web of Science

1. What subjects and publication types are included in the database?

   The three subject indices cover all subjects and journal articles only. No other publication type is indexed unless it appears in a journal. For the most part the journals indexed are in English not any other language. The two document type indices cover all subjects and only the conference proceedings document type.

2. What are the coverage dates?

   Science Citation Index is 1900 to the present.
   8,300 journals are indexed
   Social Science Citation Index is 1900 to the present.
   2,900 journals are indexed
   Arts & Humanities Citation Index is 1975 to the present.
   1,600 journals are indexed
   Conference Proceedings Citation Index is 1990 to the present.

3. What Boolean or Proximity operators are used by the database?

   1. NEAR/x Use NEAR to find both concepts within x words of one another
   2. SAME Works only when doing an Address search.
   3. NOT Use NOT before the concept you want to eliminate
   4. AND Use a space between key concepts.
      Example: aspirin blood
   5. OR Use OR between synonyms and enclose them in parentheses.
      Example: aspirin (blood OR hemoglobin OR plasma)

4. If truncation is allowed then what symbols are used?

   a. Automatically finds variant word endings, plurals, & British spellings
   b. You can force truncation:
      Asterisk (*) – represents any group of characters, including no character.
      Dollar Sign ($) – represents zero (0) or one (1) character.
      Question mark (?) – represents any single (1) character.

5. If wildcards are allowed then what symbols are used?

   Same as in question 4.

6. How do you search for a phrase?

   To search for an exact phrase, enclose the phrase in quotation marks.

7. Is it possible to group words from the same concept?

   Yes. Use parentheses, example: (blood OR hemoglobin OR plasma).

8. Any unique features?

   You can do a cited reference search
   There are no stopwords.
From the Chemistry Library homepage (library.nd.edu/chemistry) click on the Web of Science link in the left column of the page.

For this practice, be sure to select:
Search -> Web of Science Core Collection tab (at the top of the page).

Basic Search (text in bold blue).

Timespan: is All years

BASIC SEARCH - Topic

1. Circle the key concepts in the following sentence:
   What is the effect of aspirin on blood clotting?

2. Type the sentence from Q1 into the topic search box. (don’t include ?)
   How many records are found? ________________________________
   (You should get more than 0)
   Click on the title. Write the words highlighted in yellow.
   The system identifies your search terms with yellow highlighting.

Stopwords & Key Concepts: WoS doesn’t identify any key concepts or stopwords.

Click on Search (White text on Orange background – upper left of window)

3. Search for the key concepts. Type aspirin blood clotting
   How many records are found? ________________________________
   (You should get more than 300)

Implied AND: WoS replaces every space in the search with the Boolean AND

Phrases: Use “quote marks” to tell WoS you are looking for a phrase

Truncation: WoS looks for variant endings of a word unless the word/phrase is within quotes. You can force the system to get variant endings by using the truncation symbols (* $ ?). The asterisk is the one you will use most frequently.
*  for any number of characters;
$  for 0 or 1 characters;
?  for exactly 1 character.
**Synonyms:** WoS does not look for synonyms nor does it identify synonyms. You must supply the synonyms by using the OR operator.

**Example:** (Synonym* OR “related term*”): Put an OR operator between synonyms or related terms then enclose them in parentheses.

*correct:* tradition$ AND (holiday* OR thanksgiving OR Christmas OR Easter)

*incorrect:* tradition$ AND holiday* OR thanksgiving OR Christmas OR Easter

4. How many records contain aspirin or its synonyms acetylsalicylate and acetylsalicylic acid? Remember to consider variant endings and phrases.
   (You should get between 55,700 and 56,700 records.)

5. How many records contain blood clotting or its synonyms coagulation and hemostasis? Remember to consider variant endings and phrases.
   (You should get between 128,650 and 138,650 records.)

**SEARCH HISTORY**

Click the **Search History** link (upper right side of search screen)

You can combine previously created sets.

6. Combine the two sets you created in Q4 and Q5 using AND as the Boolean operator.
   A. How many records are found?
      (You should get between 1,800 and 2,100 records.)

   B. Why do you think this is a much better list of results than the list in #3?

**REVIEW: Comparing databases**

Here is your problem statement: Find any benefit for adding linoleic acid to animal feed also known as fodder while avoiding linoleic acid added via dietary supplements.

7. Write the key concepts?
8. What would you type into the search box for each database listed below?
   A. Google:
   
   B. SciFinder:
   
   C. Web of Science:
   
   Compare your answers with those of another person.
   At the end of class, I will show you my answers.

CITED REFERENCE SEARCH – Cited Author & Cited Work

Cited Reference searching is the most important feature of Web of Science. It allows you to come forward in time with research.

For example, let’s say I have just written an article about Vitamin C and in my article I cite the book *Vitamin C and the Common Cold* by Linus Pauling. You have a copy of Linus Pauling’s book *Vitamin C and the Common Cold* published in 1970 and you want to find out who is doing current research on the topic of Pauling’s book. The first place you would go would be to a database that allows you to do cited reference searching such as WoS or SF. You would then discover that my article cited the Pauling book therefore my article might be of interest to you.

Cited references will include
   1. pre-1900 records;
   2. records to non-journal publication types (e.g. patents, conference proceedings, books, foreign language serials, etc.);
   3. records to serials not indexed

Go to the search screen - Click the blue down arrow and select Cited Reference Search

Looking for cited authors: Last name first & no punctuation. Web of Science started using first names and middle names in 2009. Prior to 2009 they used just initials. WoS automatically truncates what is entered in the author field.
   Incorrect: Kennedy, John F.
   OK:      Kennedy JF
   Better:  Kennedy J* is the same as Kennedy J
9. Frank J. Castellino published an article in *Journal of Molecular Evolution*.
   a. How many times has it been cited?
   (Cited Work uses the journal abbreviation. Click **journal abbreviation list** to get the correct form of the name.)

   The row with the View Record link has all right elements of the citation. The other two have incorrect elements – wrong starting page & wrong year. Authors make mistakes and editors & referees don’t catch the mistakes in the bibliography.

   b. Record the year this article was most recently cited.
   (Click the box(es) to the left of the citation(s) and click the **Finish Search >>** button.)

    a. What year was the article published?

**ADVANCED SEARCH (get to this from the blue down arrow)**

For those that feel very confident about their understanding of Boolean operators and parentheses and don’t want to be constrained by the boxes on the Basic Search page then this is the page for you. The Advanced Search page **does not** permit you to do any Cited Reference searching.

Look at the advanced search page before doing the next four questions: There is a search box near the top of the page. Above the search box are two sample searches with a link to more sample searches. To the right of the search box is a box listing all the available field tags and Booleans. Below the search box is the search history.

11. How many articles are from your hometown? Look at the blackboard, If someone has already done it for your hometown, then pick a neighboring town.
    (Be sure to include the US state abbreviation or Canadian province abbreviation or country name. For example, Cambridge is a city in Australia, 2 Canadian provinces, England, New Zealand, and 25 US states.
    Help (upper right corner) -> Index (upper right corner) -> Abbreviations – Countries For States/Provinces use the two-letter postal code.

    (Use ad="notre dame in" instead of the ci and ps fields.)

Write hometown and answer on the blackboard.
12. How many articles were published in 2015 coming from the Notre Dame IN.  
(You should get fewer than 3,000 records.)

13. How many articles were published in 2015 coming from the Notre Dame zip code (46556).

14. Why are the answers different for Q12 and Q13?  Use the power of the database: use the Boolean NOT, then look at the first three results to answer this question.  
(Your search will look something like #34 NOT #36 and you should get 10 to 70 records.)

BASIC SEARCH - Author

Looking for authors: Last name first & no punctuation.  Web of Science started using first names and middle names in 2009.  Prior to 2009 they used just initials.  WoS automatically truncates what is entered in the author field.

Incorrect:  Kennedy, John F.  
OK:  Kennedy JF  
Better:  Kennedy J

15. How many articles have Paul M. Helquist as an author.  
(You should get more than 180.)

Of course, you don’t know if you have Paul M. Helquist (a Notre Dame faculty member) or some other Paul or Peter or Phyllis or Patricia.  There are two ways to limit your results by providing additional information.  
Analyze Results (top right) or Refine Results (left side)
Choose **Analyze Results** to answer #16.

16. How many of those articles from #15 are written by someone associated with the University of Notre Dame as an organization? 
   (You should get more than 135)

Click the check box for the Notre Dame results then click the **Refine** button before proceeding

Use **Refine Results** to answer Q17 & Q18.

17. Based on your answer in Q16 – In which source does Paul Helquist most frequently publish?

18. Based on your answer in Q16 – In which year did Paul Helquist have the greatest number of publications?

19A. How many articles have cited at least one 1997 Paul Helquist article? 
   (You should get more than 100)

19B. How many articles are there where Paul Helquist cites one of his own articles from 1997? (this is also called self-citing) 
   (You should get fewer than 10)
BASIC SEARCH – Author (multi-part last names)

**Looking for authors with a multi-part last name:** Search multi-part last names with a $ truncation symbol between the parts.

Example:  van$buren m  is the way to search for Martin van Buren

20. Nancy J Miller-Ihli is a research chemist for the U.S. Dept. of Agriculture. She has been at the USDA for over 20 years. How many articles are indexed in WoS? (You should get more than 60 articles.)

Optional: If you want to test things then redo the search several different ways:

Miller-Ihli NJ  Miller Ihli NJ  MillerIhli NJ

BASIC SEARCH – Author identifiers

Unique identifiers for authors are not commonly used, but are slowly taking hold as people and organizations see the benefits.  **Benefit 1:** How many unique names are there?  Have you ever encountered people that have the same name?  If people with the same name write something, how do you know which person wrote it?  **Benefit 2:** Do people ever change their last name?  If so, then how do you get a complete list of all the papers that person has written?

Examples of author identifiers include:

ORCID; PubMed Author ID; ResearcherID, Scopus Author ID

21. B-7325-2013 is an example of a ResearcherID which is used by Web of Science. How many articles are associated with it?

What are the two names associated with this ResearcherID?

Approximately what year did the name change?