Research Worksheet

1.	**Topic:**	

2. **Search Limits:**

Languages:

Publication Dates:

Source Types:

☐ Books	☐ Dissertations & Theses
☐ Journal Articles	☐ Statistics & Data
Peer reviewed only: Yes / No	☐ Conference Papers & Proceedings
☐ Popular Magazine Articles	☐ Reports (e.g., Company, Country, Industry)
☐ Trade Magazine Articles	☐ Videos & Audio
☐ News	☐ Other (specify):

Other Limits:

3. **Search Tools:**

Use Discovery, Databases and Research Guides on the Library's home page library.mcmaster.ca to identify databases and other search tools covering your topic and your search limits.

Core Search Tools [in a field of study]:

Secondary Search Tools [in other related fields of study]:

4. **Search Terms:**

Break your topic down into individual concepts.

For each concept develop a list of keywords, synonyms, subject headings and descriptors.**†**

Combine words describing the same or similar concept with OR. Combine different concepts with AND.**††**

Use truncation or wildcard symbols to pick up word variations.**†††**

Use quotes **" "** around words to find exact phrases.

	Concept A		Concept B		Concept C
OR					
OR					
OR		**AND**		**AND**	
OR					
OR					
OR					

Construct a search string using your search terms.

Use parentheses **( )** when using a mix of Boolean operators.**††**

5. **Search Results:**

Search Tool:
Date:
 # Results:
Notes:

To develop a list of words for each concept in your topic …

- check citations, abstracts, articles and bibliographies to identify terms used by authors writing in the field
- review subject headings, descriptors and thesaurus terms used for the topic in catalogues, databases and other search tools
- continue to add words that come up frequently in your searching

†† **Combining Words using Boolean Operators - AND, OR, NOT**

- **AND** = all of these words
    - example: communication **and** organizations
    - results will **include all** stated words
    - narrows search
- **OR** = any of these words
    - example: salary **or** compensation **or** income
    - results will **include at least one** of the stated words
    - broadens search
- **NOT** = none of these words
    - example: galaxy **not** phone
    - results will **exclude** stated word(s) following NOT
    - narrows search
    - ⚠ use the NOT operator with extreme caution since it may result in the inadvertent loss of relevant results; there may be items that include both the wanted and unwanted terms and all would be eliminated from the results if the NOT operator is used
- **( )** use parentheses when including more than one Boolean operator in a single search string
    - ensures stated words are combined and processed in the order intended
        - *without* **parentheses** search terms will automatically be processed from left to right; the **AND** operator will be processed *before* the **OR** operator, and the **NOT** operator will be processed **last**
        - to change the natural order of operations, **place parentheses** around words using the **OR** operator so that anything enclosed within parentheses is processed **first**; example: recruitment **and (**teachers **or** professors **or** instructors**)**

††† **Truncation or Wildcard Symbols …**

- can vary depending on the search tool being used; the asterisk ***** is the most common, but a dollar sign **$** or question mark **?** are often used as well; check the help section of your database or search tool to determine which symbol to use
- can be used to find word variations in a single search
    - manag*****   finds manag**e**, manag**ement**, manag**ing**, manag**er**, manag**erial**, etc.
    - labo*****r   finds both lab**o**r [U.S. spelling] and lab**ou**r [British/Canadian spelling]
    - wom*****n   finds both wom**a**n [singular] and wom**e**n [plural]
    - ⚠ choose the placement of the symbol carefully, to avoid irrelevant results
        - for example, man***** will find man**age** and man**agement**, as well as man, man**ic**, man**ufacture**, Man**itoba** and other unintended words
        - if truncation proves problematic, spell out the desired word variations in full using the Boolean operator **OR** between them, e.g., manage **or** management
- typically broadens a search