Animal Production

Handout 3

Steps in the Independent Study

Research Process

Steps in the Independent Study Research Process

1. Understand the assignment
2. Begin a research folder
3. Select a topic
4. Locate sources of information
5. Suggest a tentative focus
6. Develop tentative thesis if it is required
7. Check/consult with your facilitator
8. Analyse resources and select appropriate information
9. Make notes and record information for works cited list
10. Develop a final thesis
11. Conference with your facilitator
12. Prepare a tentative outline, organize information under main ideas and supporting points
13. Conference with your facilitator
14. Write a first draft
15. Edit the first draft
16. Write the final version
17. Prepare a presentation
18. Evaluate the assignment

Start

1. UNDERSTAND THE ASSIGNMENT

Make sure you understand the assignment and its requirements:
- format (project, report, research essay, oral presentation)
- due date
- length
- evaluation

Definitions:
- **Project** – a research assignment which may include maps, pictures, charts, interviews, etc.
- **Report** – an organized presentation of facts about a subject
- **Research Essay** – the written expression of your opinion (stated in a thesis) supported by information gathered independently

2. BEGIN A RESEARCH FOLDER

Have a folder. Keep it organized.

Keep **everything.**

Your folder should eventually contain:
- the assignment, and all details about dates and marks
- a record of the work you have done (a log). See Appendix 2.
- all your notes
- a record of interviews and phone calls (if applicable)
- newspaper clippings, magazine articles, pamphlets and printouts
- an ongoing record of all sources of information
- a list of appropriate subject headings
- all outlines and drafts

3. SELECT A TOPIC

See the process in Appendix 5A.
Consult with your facilitator, librarian, family and friends.
Choose a topic that is:
- interesting
- manageable (in terms of time and resources)
- appropriate

4. LOCATE SOURCES OF INFORMATION

- vertical file material
- videos
- internet
- books
- periodicals and newspapers (electronic and print)
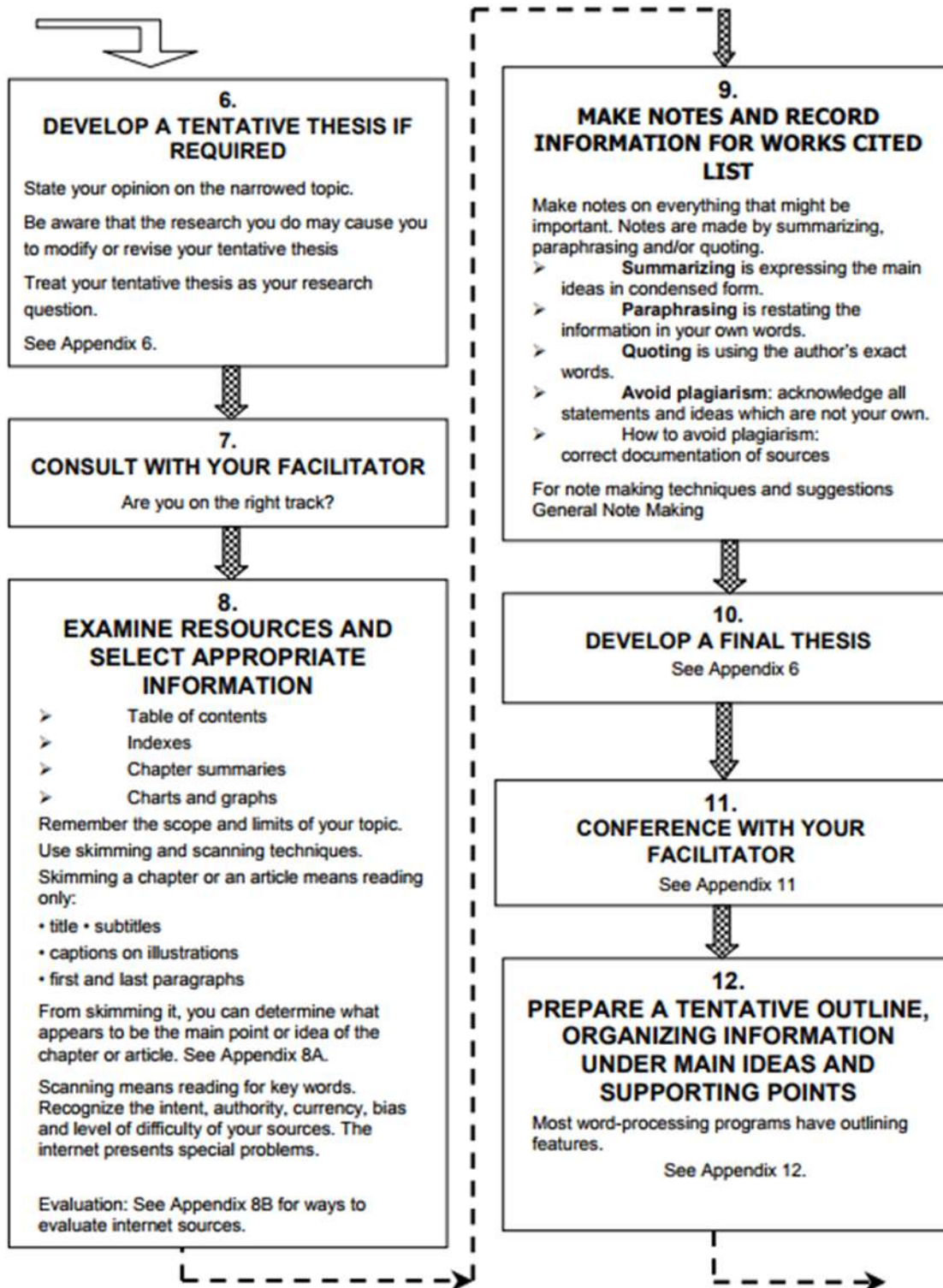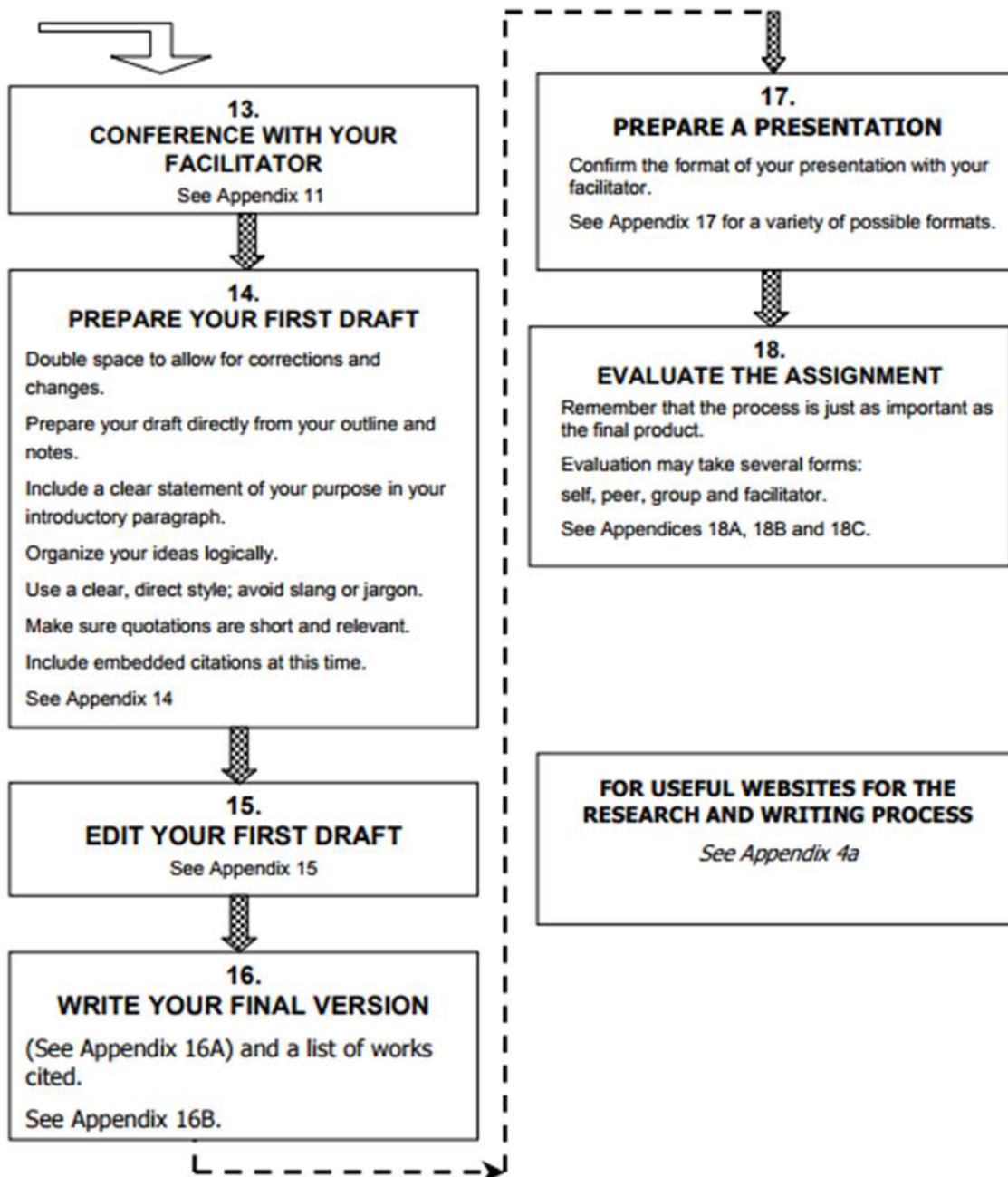- community resources
  See Appendix 4.

5. SUGGEST A TENTATIVE FOCUS

Select one aspect of the topic.
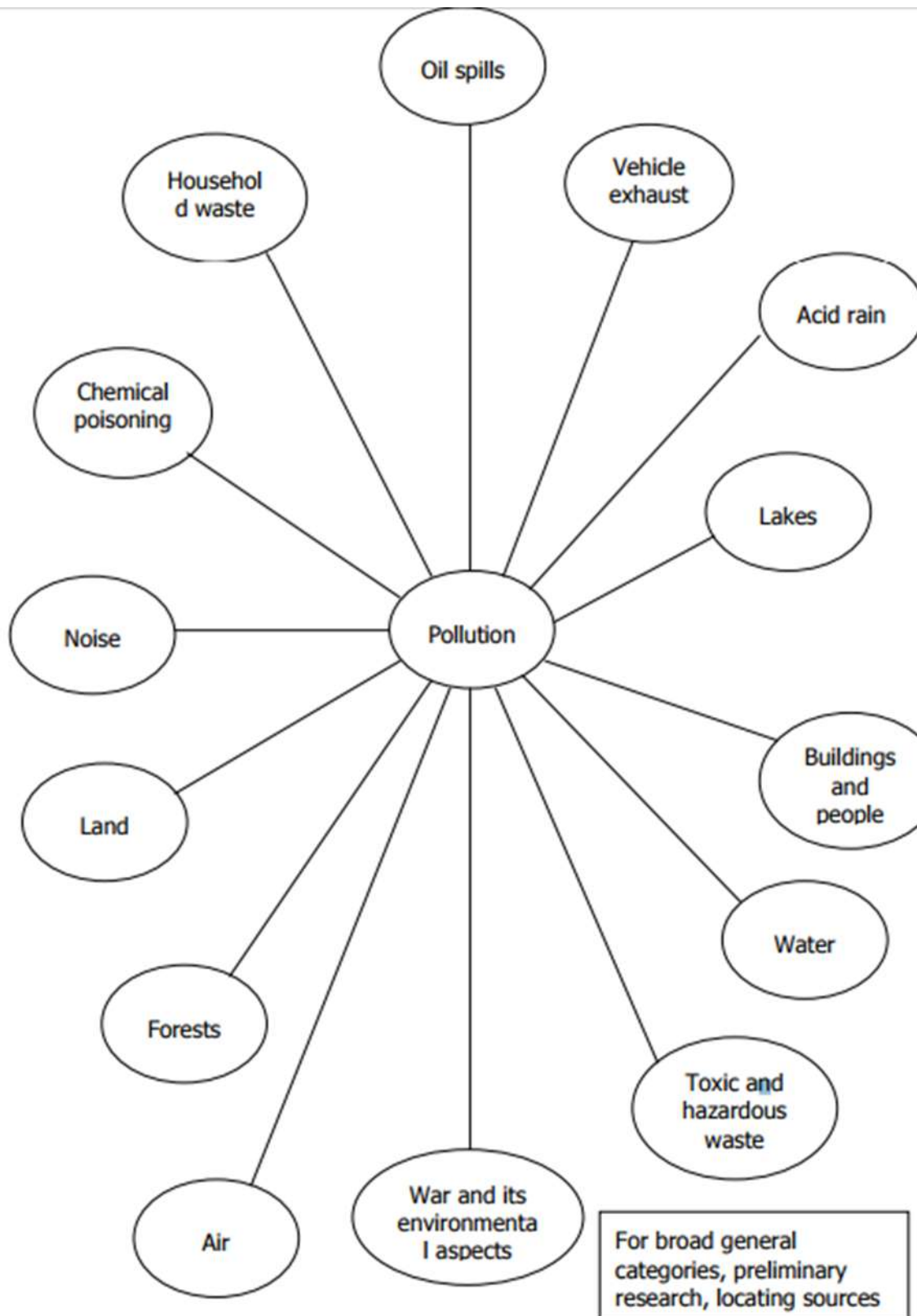
See Appendices 5A, 5B and 5C.

6.
DEVELOP A TENTATIVE THESIS IF REQUIRED

State your opinion on the narrowed topic.

Be aware that the research you do may cause you to modify or revise your tentative thesis

Treat your tentative thesis as your research question.

See Appendix 6.

7.
CONSULT WITH YOUR FACILITATOR

Are you on the right track?

8.
EXAMINE RESOURCES AND SELECT APPROPRIATE INFORMATION

➢ Table of contents
➢ Indexes
➢ Chapter summaries
➢ Charts and graphs

Remember the scope and limits of your topic.

Use skimming and scanning techniques.

Skimming a chapter or an article means reading only:

• title • subtitles

• captions on illustrations

• first and last paragraphs

From skimming it, you can determine what appears to be the main point or idea of the chapter or article. See Appendix 8A.

Scanning means reading for key words. Recognize the intent, authority, currency, bias and level of difficulty of your sources. The internet presents special problems.

Evaluation: See Appendix 8B for ways to evaluate internet sources.

9.
MAKE NOTES AND RECORD INFORMATION FOR WORKS CITED LIST

Make notes on everything that might be important. Notes are made by summarizing, paraphrasing and/or quoting.

➢ **Summarizing** is expressing the main ideas in condensed form.
➢ **Paraphrasing** is restating the information in your own words.
➢ **Quoting** is using the author's exact words.
➢ **Avoid plagiarism**: acknowledge all statements and ideas which are not your own.
➢ How to avoid plagiarism: correct documentation of sources

For note making techniques and suggestions General Note Making

10.
DEVELOP A FINAL THESIS
See Appendix 6

11.
CONFERENCE WITH YOUR FACILITATOR
See Appendix 11

12.
PREPARE A TENTATIVE OUTLINE, ORGANIZING INFORMATION UNDER MAIN IDEAS AND SUPPORTING POINTS

Most word-processing programs have outlining features.

See Appendix 12.

13.
CONFERENCE WITH YOUR FACILITATOR
See Appendix 11

14.
PREPARE YOUR FIRST DRAFT

Double space to allow for corrections and changes.

Prepare your draft directly from your outline and notes.

Include a clear statement of your purpose in your introductory paragraph.

Organize your ideas logically.

Use a clear, direct style; avoid slang or jargon.

Make sure quotations are short and relevant.

Include embedded citations at this time.

See Appendix 14

15.
EDIT YOUR FIRST DRAFT
See Appendix 15

16.
WRITE YOUR FINAL VERSION

(See Appendix 16A) and a list of works cited.

See Appendix 16B.

17.
PREPARE A PRESENTATION

Confirm the format of your presentation with your facilitator.

See Appendix 17 for a variety of possible formats.

18.
EVALUATE THE ASSIGNMENT

Remember that the process is just as important as the final product.

Evaluation may take several forms:

self, peer, group and facilitator.

See Appendices 18A, 18B and 18C.

FOR USEFUL WEBSITES FOR THE RESEARCH AND WRITING PROCESS

See Appendix 4a

WORK LOG

Name: _____ Assignment: _____

Date: _____ **Time Spent:** _____ **hour(s)** _____

Work done: _____

_____

_____

_____

Resources used: _____

_____

Date: _____ **Time Spent:** _____ **hour(s)** _____

Work done: _____

_____

_____

_____

Resources used: _____

_____

Date: _____ **Time Spent:** _____ **hour(s)** _____

Work done: _____

_____

_____

_____

Resources used: _____

_____

Brainstorming the topic **– "Pollution"**

A brainstorming web diagram with "Pollution" at the center, connected to the following nodes:
- Oil spills
- Household waste
- Vehicle exhaust
- Acid rain
- Chemical poisoning
- Lakes
- Noise
- Buildings and people
- Land
- Water
- Forests
- Toxic and hazardous waste
- Air
- War and its environmental aspects

For broad general categories, preliminary research, locating sources

SOURCES OF INFORMATION:	**HOW and WHERE TO LOCATE:**

Reference Materials
- general encyclopedias

- subject specific encyclopedias,
  dictionaries, handbooks and
  Encyclopedia,
  indexes (e.g. McGraw-Hill
  Encyclopedia of Science and Technology)

- print (e.g. World Book, Britannica)
  Britannica, World

- dictionaries
- yearbooks, almanacs, directories
- atlases

HOW and WHERE TO LOCATE:

- reference section

- Internet
- CD-ROM (e.g. Canadian

  World Book)

- on-line via www: Grolier,

  Book, Galenet

Books:
- electronic catalogue

Periodicals and Newspapers:
- Guide to Periodicals and Newspapers in the Public Libraries
- on-line access via the Internet (Electric Library, EBSCO, SIRS, CPIQ, NEWSCAN)
- Internet

Other resources
- videos
- film and video catalogues are available

  online

- films
- television programs
- audio tapes
- slides

- SABC videos are available

USEFUL WEBSITES FOR THE RESEARCH AND WRITING PROCESS
Resources for Writers: http://owl.english.purdue.edu/writers/by-topic.html
Writing at the University of Toronto:
http://utl2.library.utoronto.ca/www/writing/index.html
Research and Argument: http://karn.ohiolink.edu/~sg-ysu/
Infozone: http://www.mbnet.mb.ca/~mstimson/
A+ Research & Writing: http://www.ipl.org/teen/aplus/
Researchpaper.com: http://www.researchpaper.com/

♦ Describe Your Topic:

_____

_____

_____

♦ Identify the Main concepts:

| Concept # 1	Concept # 2	Concept # 3

♦ Find Synonyms:

Use the appropriate thesaurus to identify synonyms. Synonyms, related terms and alternate spellings should be placed in the same CONCEPT column.

Concept # 1	**and**	Concept # 2	**and**	Concept # 3
_____		_____		_____
_____		_____		_____
or_____		or_____		or_____
_____		_____		_____
or_____		or_____		or_____
_____		_____		_____
or_____		or_____		or_____
_____		_____		_____
or_____		or_____		or_____
_____		_____		_____
or_____		or_____		or_____
_____		_____		_____
or_____		or_____		or_____
_____		_____		_____

♦ **Describe Your Topic:**

What are the effects on children of violence in the mass media?

_____

_____

♦ **Identify the Main concepts:**

Concept # 1	Concept # 2	Concept # 3
Violence	*Mass media*	*children*

♦ **Find Synonyms:**
Use the appropriate thesaurus to identify synonyms. Synonyms, related terms and alternate spellings should be placed in the same CONCEPT column.

Concept # 1 *Violence*	**and**	Concept # 2 *Mass media*	**and**	Concept # 3 *children*
or *aggression*		or *television*		or *childhood*
or *anger*		or *films*		or _____
or _____		or *computer games*		or _____
or _____		or _____		or _____
or _____		or _____		or _____
or _____		or _____		or _____

Selecting One Aspect of the Topic "Pollution" Appendix 5A
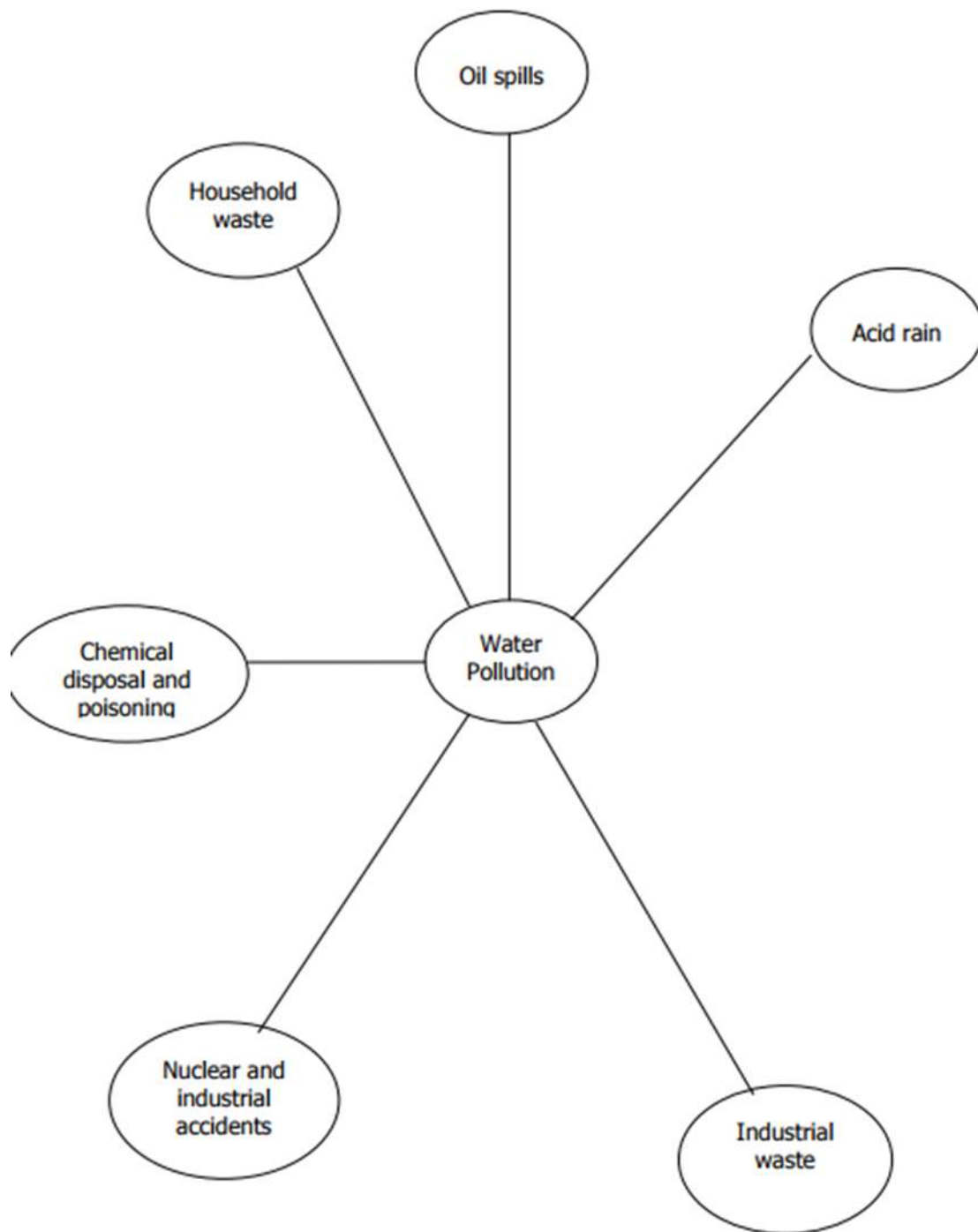
Sample research question:

What will the effects of acid rain be on inland dams over the next 20 years?
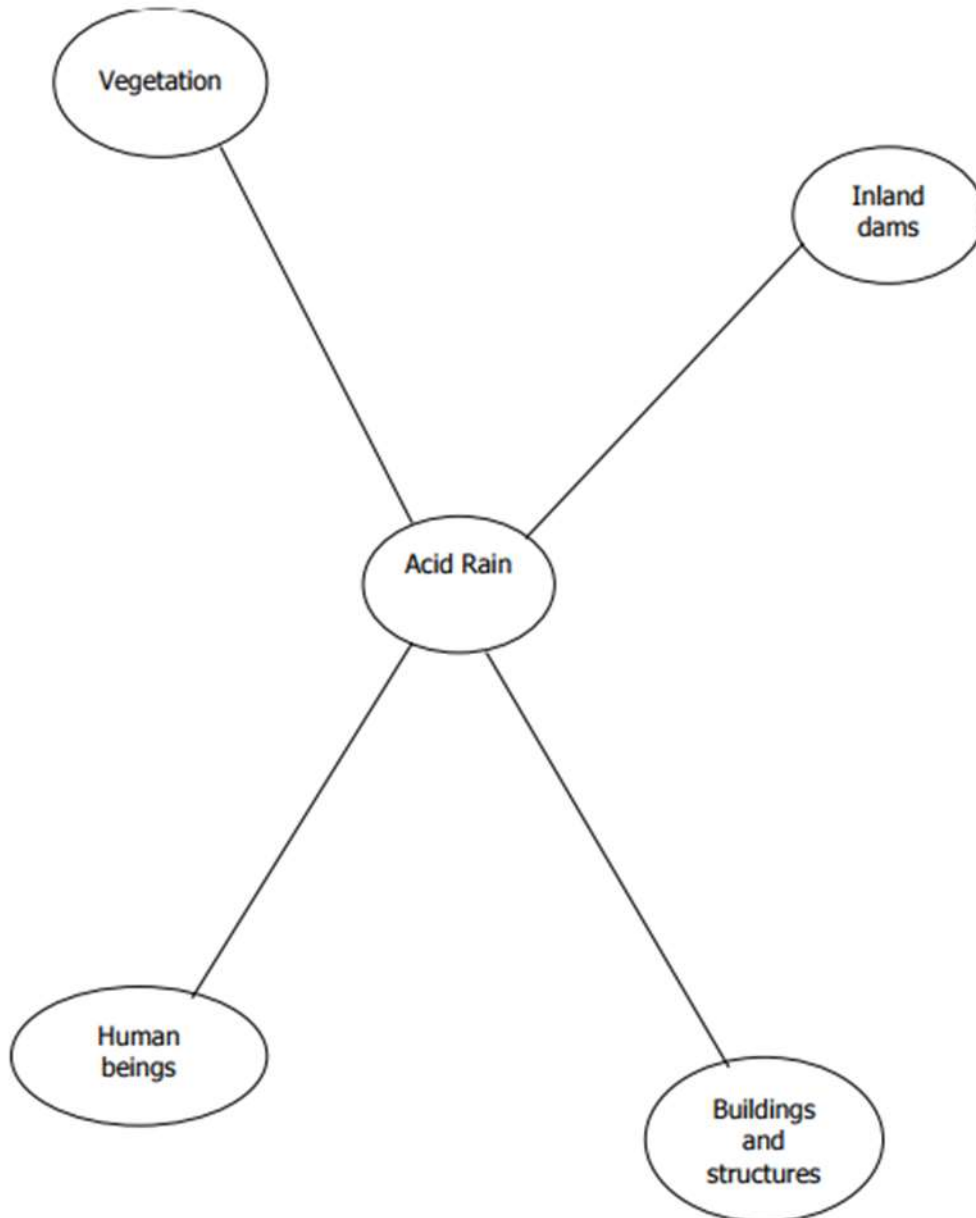
A thesis is the expression of your opinion on a topic.

- ♦ Select a topic:

  My topic: Capital Punishment

- ♦ Get an overview from a variety of sources

- ♦ Formulate a question from which your thesis statement can develop.

  Question: Does the death penalty prevent crime?

- ♦ Formulate a thesis statement that:

  - takes a stand
  - is arguable
  - can be researched

- ♦ Tentative Thesis: Capital Punishment does not deter murder

- ♦ Check your Thesis Statements against the models

Thesis	Comment	
1) Capital punishment.	This is topic, not a thesis.	
2) Does the death penalty prevent crime?	This is a good question that leads to a thesis, but this is not a thesis.	
3) The murder rate is a concern.	A statement of fact is a weak thesis. Take a stand that is arguable.	
4) Something must be done about the murder rate.	Weak thesis. What must be done? Take a stand that is arguable.	
5) Capital punishment prevents crime.	Good thesis	Both take stands and are arguable.
6) Capital punishment does not deter murder.	Good thesis	

- ♦ Can your Thesis be researched?

  Either #5 or #6 above can be researched because there are many resources on capital punishment, both pro and con, in your institution's library and in the community at large.

- ♦ How to skim a book

  - Flip through the book from cover to cover. This gives you a general impression. Is the print easily read? Are there illustrations?

  - Flip through a second time. Look for chapter headings, summaries, questions, vocabulary lists, indexes, etc.

  - Look at the book jacket. Is there a summary of the contents? Is there biographical information about the author? Look at the title page front and back. What is the date of publication? Is the book out of date?

  - Look at the preface. Does the author express a particular point of view or bias? What other useful information is contained here?

  - Skim the table of contents for relevant sections.

  - Read opening and closing paragraphs of selected chapters. They often contain summaries of the chapters.

  - Check the index for specific references to your topic.

- ♦ How to skim an article or chapter

  - Glance quickly through the article to get an overall impression of length and organization.

  - Read the title, headings, captions, words in heavy print, italicized words, etc.

  - Look closely at illustrations, charts, graphs, maps, etc.

  - Read first and last paragraphs.

  - Read the first sentence (usually the topic sentence) of other paragraphs.

  - Read any questions at the end of the chapter or article.

Scanning

Scanning involves running your eyes down the page looking for specific facts or key words and phrases. Think about what FORM the information will take: Is it a number? Is the word in capitals? How does it start?

- VISUALISE what the word or number looks like
- Use numerical order
- Do NOT read every word/number
- Read FAST and when you find the information you want then you slow down and examine it closely

When you locate a new term, try to find its definition. If you are not able to figure out the meaning, then look it up in the glossary or dictionary. Secondly, scanning is useful in locating statements, definitions, formulas, etc. which you must remember completely and precisely.

Because we live in an information age, the quantity of information on any given topic is huge. However not all of this information is useful or trustworthy. Therefore judging the accuracy of information is an important skill, which is needed all the time.

When researching a topic you will also be evaluating sources as you search for information. You can have some confidence in the information contained in books, newspapers, and magazines since these sources are edited before they are published. You need to judge whether these sources are useful in terms of coverage of the topic, whether the information contained in the source is up to date, and whether the author presents a biased viewpoint.

Evaluating Internet sources can be a problem because anyone can put anything up on the Internet. Many Internet sources are self-published by the author, have not been edited by others and are not monitored. Use the following checklist to judge the Internet sites you find. Articles found in online databases such as encyclopaedias, periodical articles databases, and newspaper databases can be treated as reliable sources because they have been edited in their original publication form. Remember, as well, that you should always use a variety of resources as part of the research process.

Useful Internet Sites for Evaluating Sources

- Kathy Schrock's Guide for Educators: Critical Evaluation Tools

  http://www.discoveryschool.com/schrockguide/eval.html

- Evaluating Sources of Information

  http://owl.english.purdue.edu/Files/131/a-start.html

- Evaluating Internet Sources

  http://members.aol.com/xxmindyxx/evaluate/question.htm

- Evaluating Web Resources

  http://www2.1widener/Wolfgram-Memorial-Library/webeval.htm

Checklist for Evaluating an Internet Site   **Appendix 8C**

Title: _____   URL: _____

♦ **Authority**

- Is the author of the page clearly indicated? (If yes, identify) YES/NO

- What are the author's qualifications and reputation in the subject? If they are not listed, can you find out?

  _____

- Has the site been rated by a reputable rating group? (If yes, identify) YES/NO

  _____

- Has it won any awards? (If yes, identify)   YES/NO

  _____

♦ **Bias**

- What does the domain address tell you about the site?

  -edu: indicates an educational site (usually a university or college)
  -gov: indicates a government site
  -org: indicates an organization or advocacy group
  -com: indicates a business or commercial organization
  -co: indicates a business or commercial organization
  -za: indicates a South African site
  -uk: indicates a British site
  -~: indicates a personal web page

- What is the purpose of the site: to inform, to persuade?

  _____

- Is there an organization sponsoring the page?   YES/NO
- Who are they? What does this tell you about the page's purpose?

  _____

- Who is the intended audience of the site?

  _____

♦ **Content and Accuracy**

- Is the material covered adequately?   YES/NO

  Explain:

  _____

- How does the site compare with others on the same topic?

  _____
- How can you tell if it was well researched?   YES/NO

  Explain:

  _____
- Is there documentation to indicate the sources of the information presented? YES/NO

  Explain:

  _____
- Does the site have links to other reliable sites on the topic?   YES/NO
- Do they work or are they out of date?
- Did you reach this site from a reputable link?   YES/NO

- ◆ Currency
  - What is the date of posting of the site?
  - Have there been revisions since then? _____ YES/NO
  - Is the information current or out of date? _____
- ◆ Technical Aspects
  - Is the site easy to load?   YES/NO

    Comment:

    _____
  - Is the site easy to navigate?   YES/NO

    Comment:

    _____
  - Do graphics, pictures and the layout add to the value of the site?   YES/NO

    Comment:

    _____
- ◆ Overall Evaluation

  After looking at all the criteria above, circle a general rating for the site:

  • Excellent • Good • Average • Borderline Acceptable • Unacceptable

  Comments:_____