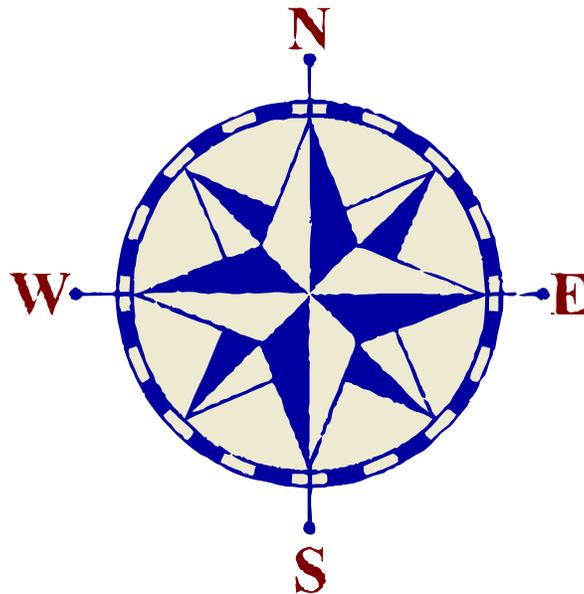


Bethlehem Central Middle School

# *Student Research Guide*



Guides from other school districts were helpful in creating this booklet, particularly those from the Burnt Hills-Ballston Lake and Guilderland districts. Two books were extremely useful: *The New York Public Library Kid's Guide to Research*, by Deborah Heiligman, and *Painless Research Projects*, by Rebecca S. Elliott and James Elliott.

September 2007

# BCMS Student Research Guide

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# 1. Exploring Topics



**Find a topic that is right for you.**

- Peruse encyclopedias, magazines, and books on topics of interest.
- Speak with your teachers, parents, and others to get ideas.
- Watch TV and listen to the news for current issues.

# 2. Choosing a Topic



**You must have a clear idea of your topic. You should narrow down this broad topic to a smaller topic that meets the following criteria:**

- It is of interest to you.
- It meets your teacher's requirements.
- It is appropriate for research.
- It can be completed within the allotted time.
- It is a topic for which you can find sufficient resources.

## Narrowing a Topic

Your teacher has assigned you a three-page paper on a topic of your choice in Earth Science. The subject of severe weather, particularly hurricanes, is interesting, but in three pages you can only write generally about the subject. You can be much more specific about the Galveston hurricane of 1900.

Severe Weather

Hurricanes

Galveston Hurricane of 1900

Too broad

Better

Just right!



It is often useful to use graphic organizers to narrow a topic, develop an outline, or see how concepts are related. *Inspiration* is a popular graphic organizer program. There are a number of free graphic organizers available on the Internet.

### Topics with Problems: These topics just don't work!

Why hurricanes in the Pacific Ocean are called typhoons

This is not a research topic because hurricanes and typhoons are different names for the same phenomenon.

Special effects in the movie *Twister*

This does not meet the teacher's requirement that the project be about Earth Science.

Hurricanes in Colonial America

This information may be too difficult to locate.

**Your teacher may ask you to develop a thesis statement. For information, see the Appendix at the end of this booklet (p. 19).**

### 3. Generating Questions about Your Topic



As you look for information, think about the kinds of questions that you want answered. These questions will help get you started. There may be other questions you want answered.

***Topic:*** *The Galveston Hurricane of 1900*

***Questions:***

*Who was most affected by the hurricane?*

*What was the track of the storm?*

*When did the hurricane hit?*

*Where was the damage most severe?*

*Why was this hurricane so deadly?*

*How were people warned of the coming storm?*

# 4. Locating Information



You can find information in many types of sources:

Books  
Encyclopedias  
Periodicals  
The Internet

CD-ROMs and Videos  
Organizations  
Experts  
Museums and Archives

OPAC



When looking for books, use the *OPAC* (online public access catalog), which contains information on every item that the library owns. Instructions are posted on the *OPAC* computers.

If you are looking for information on hieroglyphics, for example, you may want to search using that term. You may want to try broader terms as well, such as *Ancient Egypt* and *ancient writing*.

BOOKS



**Reference books** can be divided into different types. They are shelved in the Reference Section of the library media center. Basic reference sources (general encyclopedias, dictionaries, atlases and almanacs) are shelved in the **Ready Reference Section**. All reference books are designated by the letter "R" (for Reference) or "RR" (for Ready Reference). Reference books may not be checked out of the LMC.

**Nonfiction books** can be found in the nonfiction section of the LMC. They are a wealth of information for research projects. These books may be checked out to students.

Reference and nonfiction books are classified according to the Dewey Decimal System:

100	Generalities
200	Philosophy & Psychology
300	Social Sciences
400	Language
500	Natural Sciences & Mathematics
600	Technology (Applied sciences)
700	The Arts (Fine and decorative arts)
800	Literature & Rhetoric
900	Geography & History

## Getting what you want from books

- This may sound silly, but make sure that the book is relevant to your topic. If you are searching for information on pyramids, don't look in a book on twentieth century architecture!
- Check the copyright date, especially if you are researching a current topic, such as alternative energy.
- Look at the Table of Contents. If your topic is Rameses II and the chapter is titled "The Great Pharaohs of Ancient Egypt," you would expect Rameses to be included.
- Use the Index at the back to find all references to your topic.
- Make use of section headings within chapters to find information relevant to your topic.
- Look at the bibliography and/or suggested readings at the end of the book for other sources you would like to investigate.

Before you search the Index, think of **useful keywords**, including synonyms and related terms, as well as broader and narrower terms.

<b>Search Term</b>	<b>Other Keywords</b>
groundhog	synonym: woodchuck
alcohol	broader term: drugs narrower terms: beer, wine related term: drinking
Monet	broader terms: Impressionists, artists narrower term: Water Lilies (title of a painting)
Pickett's Charge	broader terms: Civil War, Battle of Gettysburg

## ENCYCLOPEDIAS AND OTHER REFERENCE BOOKS



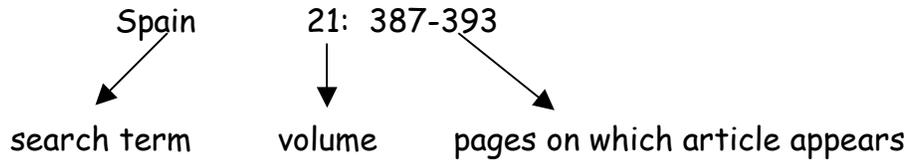
There are two types of encyclopedias:

- **General encyclopedias** have information on all topics. Examples are *World Book* and *Encyclopedia Britannica*.
- **Specialized encyclopedias** focus on certain subjects: Examples are *Grolier Encyclopedia of Endangered Species*, *Encyclopedia of North American History*, and *Encyclopedia of Careers*.

## Getting what you want from encyclopedias

**General encyclopedias** are arranged alphabetically. Use a word that will help you find your topic (this is called a keyword) and go directly to the volume that contains the word you want. You will also want to use the Index, in the last volume of the whole encyclopedia set, to locate all references to your topic.

## How to read an entry in an encyclopedia index



Note: In some encyclopedias, the volume is represented by a letter rather than a number (for example: S for the "S" volume).

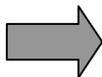
**Specialized encyclopedias** may have the following features:

- They may be arranged alphabetically or by subject.
- They may have indexes in each volume and/or a cumulative index at the end of the set.
- They may contain several types of indexes. For example, an animal encyclopedia may have indexes of common animal names, scientific names, and geographic distribution, as well as a general index. At the beginning of the Index section in the last volume, you will often see a list of indexes included.



- In the first volume, look at the **Table of Contents** to see the layout of the set. Is it arranged alphabetically or topically? Is there more than one index? If so, what types of indexes are there? Are they in the last volume only or in each volume?
- You can also look at the **front covers and spines of the volumes** to see if the set is arranged alphabetically or by topic. For example, a science encyclopedia may have one volume on physics.

Here is an example of a science encyclopedia arranged by topic.



Vol. 1 Earth Science	Vol. 2 Physics	Vol. 3 Biology	Vol. 4 Chemistry
----------------------------	-------------------	-------------------	---------------------

## PERIODICALS



**Magazines** - The issues for the current calendar year are shelved in the reading area opposite the Circulation Desk. Back issues are stored alphabetically by magazine title on shelves behind the Circulation Desk. Three magazines--*National Geographic*, *Cobblestone*, and *Current Biography*--have separate volumes that are indexes. See the LMC staff for instructions on their use.

**Journals** - These are written for scholars and researchers and often come out quarterly. The contents of some can be quite technical.

**Newspapers** - The previous two weeks of the *Albany Times Union* are kept in the reading area opposite the Circulation Desk.

To locate a magazine or newspaper article in print, you need:

- Title of the article
- Author of the article
- Title of the periodical
- Issue date of the periodical
- Page numbers of the article

### Getting what you want from periodical indexes

**Periodical Indexes** - A wide variety of newspapers and magazine articles can be accessed through **computerized indexes**, which can be found on the LMC web site at <<http://bcsd.k12.ny.us/middle/lmc/lmc.htm>>. Click on *Online Databases*. See the library staff for instructions on using these sources.



These databases are available on any computer with Internet access. Users must submit a password to gain access outside school. See the LMC staff for a list of databases and passwords.

# INTERNET



## Developing a Search Strategy

- Describe your topic in sentence form.  
Example: *What was the role of the family in the Middle Ages?*
- Circle or underline the major terms you want to search:  
Example: *What was the role of the family in the Middle Ages?*
- Develop several possible search terms for each concept you select.  
Example:

Concept #1	Concept #2
family	Middle Ages
home life	Medieval Period
children	

- Use **and** to combine different concepts in a search strategy.  
Most search engines (Google, Yahoo, etc.) also allow you to use a **plus sign (+)** instead of the word **and**.  
family *and* "Middle Ages"  
family +"Middle Ages"  
(Retrieve documents that include both **family** and **Middle Ages**)
- Enclose phrases in quotation marks:  
"Middle Ages" +"home life"  
(Retrieves documents that contain these words within a phrase)
- Use a **minus sign (-)** to exclude a term:  
Star Wars -"Phantom Menace"  
(Retrieves documents that contain the phrase **Star Wars** but exclude the term **Phantom Menace**)

## Getting what you want from Internet tools



- Use **Internet guides** to locate quality sites chosen by experts. Examples include Librarians' Index to the Internet <<http://lii.org>> and KidsClick! <<http://sunsite.berkeley.edu/KidsClick!/>>.
- When using a search tool, such as Google or Yahoo, go to **Help** or **Search Tips** to learn how to search more effectively.
- Use the **Advanced Search** option to refine and/or limit your search.
- Read the **summaries** of the documents you have found before opening them. Select the documents that look most promising.
- Check **links to similar pages** listed in the summaries.
- Use **specialized search tools** if possible (*CNN, Time, Map Machine*).
- If you are not having success, **change your search terms**.
- Use **several search engines**.

## Evaluating Websites

Anyone can put up a website. Students should try to determine the quality of the websites they use. The following evaluation criteria can help:

- |                                    |  |
|------------------------------------|--|
| <b>Authority</b>                   | <b>Who is the author? Is there a reputable sponsoring organization?</b><br><i>Check links to author or sponsoring organization; look for an email address for the author or site administrator.</i>          |
| <b>Accuracy</b>                    | <b>Is the information accurate?</b><br><i>Check for factual and grammatical errors; compare the information with reliable sources of information; look for a bibliography.</i>                               |
| <b>Objectivity</b>                 | <b>Is the site balanced in its presentation of information?</b><br><i>Check the domain type (.edu, .gov, .com); check links to the author or organization to determine the site's purpose; look for ads.</i> |
| <b>Currency</b>                    | <b>Is the site up-to-date? Is it important that it is up-to-date?</b><br><i>Check for date of posting or last update and for links that don't work.</i>  |
| <b>Organization<br/>And Design</b> | <b>Is the site logically arranged and easy to navigate?</b><br><i>Make sure you can get around the site without confusion.</i>   |



See the Appendix for additional information on websites.

## OTHER SOURCES



**CD-ROMs and Audiovisual Materials** - They are listed in the OPAC along with the books. If you are interested in using them, the LMC staff can arrange for you to view a video or use a CD-ROM program.

**Museums, Archives, and Other Organizations** - Local organizations can often be found in the telephone directory's yellow pages. You can call, write, or email them for information. Many organizations have websites.

**Experts** - Speak with your teacher, as well as family and friends, who may be acquainted with people knowledgeable in different subject areas. Local organizations are also a source of expertise in their specialized areas of interest. The Internet is a wonderful place to look for experts of all kinds.



**Interviewing People** - If you decide to interview someone, whether it is your grandmother or the head of a company, keep the following points in mind:

- Know how much time you will have with the person; this will affect the number of questions you ask.
- If possible, do some background research on the person beforehand.
- Prepare your questions in advance and make sure that you ask the questions that are most significant to your project.
- Be on time for the interview.
- Take notes or use a tape recorder (with permission, of course).
- Be courteous.
- Write a thank-you note after the interview.

## 5. Taking Notes



**Source cards are used to keep track of your sources.**

- Each source card contains the bibliographic citation for a source used in your project. The citation for each source will be used in your *Works Cited*.
- Use a different card for each source.
- In the upper right-hand corner, label each source alphabetically (A, B, C...). Each letter identifies a source.
- Alphabetize your source cards according to the first word on each source card. Your sources can then be easily transferred to the *Works Cited* page.



Refer to the *BCMS Style Sheet* for instructions on creating source cards for different type of sources.

### Sample Source Card for a Book

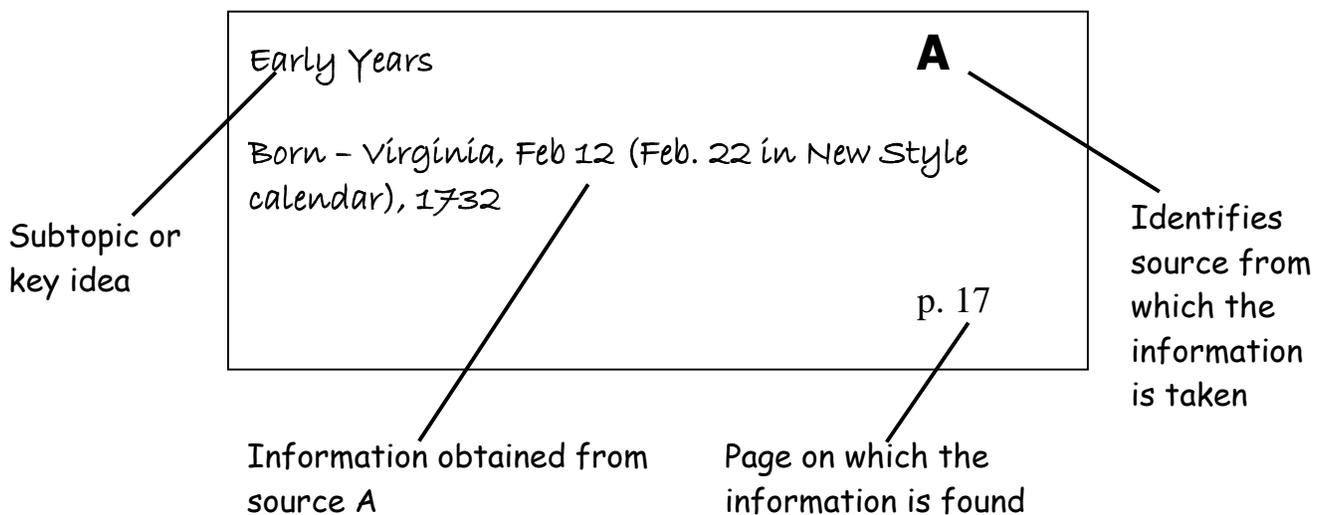
<b>A</b>
Marrin, Albert. <i>George Washington and the Founding of a Nation</i> . New York: Dutton Children's Press, 2001.

Identifies this as the first source used.

## Fact cards are used for note taking.

Each fact card contains the following information:

- A letter in the upper right-hand corner indicating the source from which the information is taken
- Subtopic or key idea in the upper left-hand corner  
The subtopic is the category into which the information on the fact card fits.
- Information obtained from the source
- Page on which the information is found



## Note taking may be done in a number of ways:

- Brief summary or paraphrase of another's ideas
- Direct quotation—copied word-for-word and placed inside quotation marks
- Short list—information broken down into list form

If an author lists the main causes of the Civil War, you may list them on one fact card.



When you take notes, do not write full sentences, but include only key words (see fact card above). This method will make it easier for you to put the notes into your own words. **It will also help you avoid plagiarism--taking someone else's words or ideas without giving that person credit.**

# 6. Defining Your Product



For some assignments, your teacher will instruct you to write a report, make a poster, etc. If, however, you are permitted to choose how to present your information, think about which format will best convey your information. Also consider factors such as the amount of time you have and the types of resources needed to create the product. Below are a number of possible formats:

**Advertisement**

**Annotated Bibliography**

**Artifact**

**Brochure**

**Classroom Museum**

**Collage**

**Commentary**

**Court Trial**

**Critique**

**Dance**

**Debate**

**Diary**

**Editorial**

**Essay**

**Feature Article**

**Flow Chart**

**Game**

**Invention**

**Letter to the Editor**

**Model**

**Multimedia Presentation**

**Music**

**Photo Album**

**Picture Book**

**Poster**

**Puzzle**

**Short Story**

**Simulation**

**Skit**

**Speech**

**Time Capsule**

**Timeline**

**Video**

**Written/Oral Report**

- After researching life on the Oregon Trail, a student decides to create a diary of a pioneer traveling west.
- A group of students presents a debate on the issue of school uniforms.
- A student creates a model of the Wright Brothers' airplane.
- Two science students create a video illustrating laboratory safety.

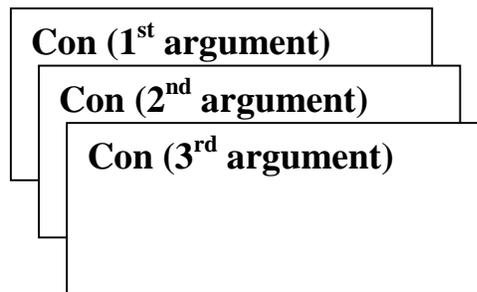
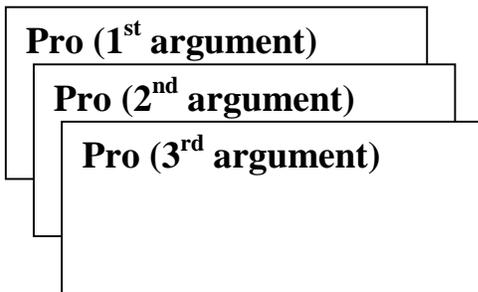
# 7. Producing Your Product



Determine the approach that will best convey your ideas. Below are just some of the possible ways to organize your information.

Topic	Possible Method of Organizing Information
History of rock music	Chronological order
Differences/similarities between Earth and Mars	Compare and contrast
Reasons for the fall of the Roman Empire	Cause and effect
The controversy over school uniforms	Pro and con

Arrange your fact cards according to the organizational approach you have selected. For example, you might present the issue of school uniforms by separating arguments in favor of uniforms from those against.



- Your teacher may require you to write an outline of your paper before you begin writing a rough draft.
- Your teacher may ask you to revise your work several times before you write the final draft.



Refer to the *BCMS Style Sheet* for instructions on formatting a research paper and the *Works Cited* page.

## 8) Evaluating the Product



When your project is completed, you will want to make sure that it is a high quality product. Make sure that you have met the following criteria:

### Research Process

- My project covers the material on the topic.
- The focus of my project is clear.
- I have answered the research question(s) posed.
- I have provided examples to support my main ideas.
- My conclusion follows from the main ideas.
- I have organized my project in a logical manner.
- I have used my own words and included works cited and in-text citations when needed.

### Writing Process

- My project includes a clearly stated introduction and conclusion.
- Each paragraph has a topic sentence supported by the other sentences in the paragraph.
- Each paragraph further develops the main topic.
- I have varied the sentence structure.
- My grammar and punctuation are correct.

### The Product

- I have followed my teacher's instructions in my research project.
- I have reviewed the rubric my teacher has given me.

# Congratulations!

# Appendix



# Writing a Thesis Statement

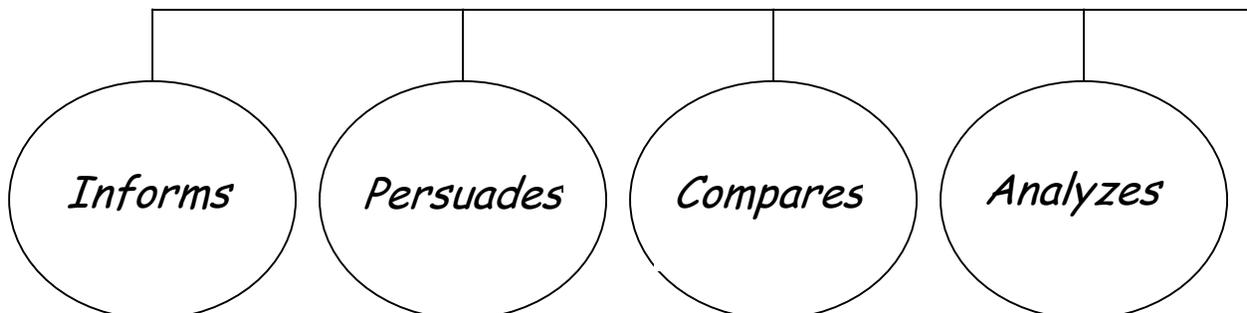
A thesis statement presents the main idea of your research paper and can be supported by evidence. You can develop a thesis statement by reading about your subject and formulating questions, ideas, and/or conclusions based on what you have learned. A thesis statement is not the same as a fact, which does not require any further explanation. A good thesis statement is not based on emotion, but on information.

A thesis statement consists of two parts:

1. The topic: Violent Video Games
2. The point you are making in the paper: are a cause of teen violence

<b>Topic</b>	Video Games	This is a general area of interest.
<b>Fact</b>	Some video games are violent.	This is a simple fact.
<b>Emotional statement</b>	Video games are boring.	This is a personal opinion. It cannot be supported by evidence.
<b>Thesis Statement</b>	Violent video games are a cause of teen violence.	This statement can be supported by evidence (the student has done background reading and collected information in support of this position).

A thesis statement can direct writing that



# The Nuts and Bolts of a Web Address

*Also called a URL, or Uniform Resource Locator*

## Protocol:

Stands for  
HyperText Transfer  
Protocol - the type of  
connection you make  
to a website

## Directory:

The file you are  
accessing is located  
within these folders or  
directories on the server.

<http://www.mnsu.edu/emuseum/history/middleages/knight.html>

## Address:

This is the domain name of the  
server machine to which you  
are connecting. It is another  
name for the Internet address.

## File Name:

This is the name of  
the file that you  
have accessed.

**This is the address of the University of Minnesota at Mankato. The address above is for a file titled *Knight's Realm* within the emuseum directory.**

Common Domain Types	Examples
.com commercial (for profit)	America Online <aol.com>
.edu educational	Smithsonian Institution <www.si.edu>
.org organization (not-for-profit)	American Cancer Society <www.cancer.org>
.gov U.S. government	Department of Justice <www.usdoj.gov>
.mil U.S. military	U.S. Navy <www.navy.mil>

*Adapted from Tom Snyder Productions*

# "Reading" a Document on a Website

Below is an example of an Internet document and how to cite it correctly.

Web address of document

Title of website



Title of document

Date of document update

Authors of document

## Citation

Ilieva, Tsvetelia and Stoyan Nenov. "Ancient 'Olympic' Riches Unearthed." MSNBC.  
20 Aug. 2004. 28 Aug. 2004 <<http://www.msnbc.msn.com/id/5772957/>>.

Date of document update

Date of access