

Research Handbook for the Lakeland Central School District 2019-2020

Lakeland High School Walter Panas High School
Lakeland Copper Beech Middle School

NAME _____

PREFACE

Library Media Centers in the District's secondary schools provide both print and electronic resources. Our ultimate goal is to help students develop reading habits, independent study skills, effective search strategies, and positive research attitudes that will enable them to be college and/or career ready as information literate citizens. As academic researchers, students will become familiar with subscription databases, the copyrighted materials they contain, and the best ways to use them. This library handbook has been prepared to assist in the research and information evaluation process. Lakeland uses the Modern Language Association (MLA) 8th Edition format to write and cite your sources.

A Note about Plagiarism

When taking notes and writing your research paper, you must be careful not to plagiarize.

Plagiarism is defined as using another person's ideas or words in your writing without giving credit to the source. This is intellectual theft.

- **Beware of Plagiarism.** The writer must document any borrowed material their teacher might otherwise mistake as the author's own. If in doubt, **cite**. To "cite" means to give credit to the original writer or thinker. Another phrase for "to cite" is "to document." The following are examples of information to be cited:
 1. Direct quotations
 2. Paraphrases
 3. Information
 4. Ideas (taking someone's original thought)
 5. Arguments
 6. Statistics
- Paraphrasing is not as simple as changing a few words in a sentence. When you use a thesaurus to substitute different words, the syntax (structure of the sentence) remains the same. This is **still plagiarism**. When you take notes, it is imperative that you put the author's ideas into your own words, using your own sentence structure. Think about those ideas. What do they mean to **you** and how can **you** say it? Remember that even though the words have been changed from the original text – the original thought belongs to the source and still need parenthetical documentation.
- **Plagiarism is taken very seriously. It will result in a zero on the paper and in disciplinary action.** (See student handbook.)

- TABLE OF CONTENTS -

Preface	1
A Note about Plagiarism	1
The Research Paper -- The Process	3
Avoid these commonly made mistakes & errors	3
A Note about Primary and Secondary Resources	4
Bibliography vs. Works Cited	4
Methods for Taking Notes	4
Sample Notes	5
Quick Guide to MLA In-text Citations	5-6
A Note on “Sandwiching”	7
An Embedded Direct Quotation	7
Putting Your Paper in Final Form	8
Formatting Your Research Paper in Google Docs	9
Formatting Works Cited Pages in Google Docs	10
Rules for Works Cited or Bibliography Pages	11
CITATION EXAMPLES	12-15
MLA Format Research Paper Checklist	16-17
SAMPLE RESEARCH PAPER	18-23
SAMPLE WORKS CITED PAGE	24

THE RESEARCH PAPER -- THE PROCESS

The following **five steps** are a general guide to help you search for information related to your topic. They will help you organize and write your paper. Always make sure to follow the guidelines set forth by your teacher for each individual assignment.

1. **Initiate inquiry.** Determine what you want to know about a topic and develop your questions. Limit or clarify your topic by browsing research materials, including books and online databases. This will help you develop key words to focus your research.
2. **Gather information.** Find and take notes on sources that will help you answer your inquiry questions and define the scope of your investigation. Your search may take you into unfamiliar territory or places that are unexpected but fruitful. At this stage you will maintain a record of preliminary sources you have used. This may include the use of a graphic organizer or annotated bibliography.
3. **Deepen your understanding.** Formulate your temporary thesis statement and organize the structure of your paper. The basis of a research paper is the thesis or controlling idea.
4. **Finalize inquiry.** - Rough draft
 - Determine what you have learned and what more you will need to know.
 - Revise your thesis statement and outline and write a first draft. You may have altered your original thesis because of information found during your initial search. This is entirely possible and acceptable.
 - Gather and analyze more information to complete your inquiry.
5. **Final Draft using an evidence-based perspective** (i.e., what have you found, what facts support or do not support your thesis?) Revise and edit your text according to MLA guidelines, which include proper parenthetical documentation and a Works Cited Page.

Based on *Researching to Deepen Understanding: Developing Core Proficiencies*, an odelleducation.com publication aligning secondary ELA to Common Core Standards.

AVOID THESE COMMONLY MADE MISTAKES AND ERRORS

- **Stringing quotes together without commentary.**
- **The period must be outside the parentheses when the citation is within them – unless it is a quote longer than 4 lines - example: (Asher).**
- **In the body of your paper, only hit “enter” once to begin a new paragraph.**
- **URLS *are* required.**
- **Not matching quotes or paraphrase citations to what is on the Works Cited page.**
- **Double, double spacing on the Works Cited page.**
- **Forgetting to do the hanging indentations on the Works Cited page.**

A NOTE ABOUT PRIMARY AND SECONDARY SOURCES

When taking notes and writing your research paper, you will use both **primary and secondary** sources. When you read original source material, you will be researching **primary sources**. When you consult authorities on your subject, you will be researching **secondary sources**.

EXAMPLES



Topic: Stories of Edgar Allan Poe

Primary Source: A short story written by Poe

Secondary Source: A book of literary criticisms on Poe

Topic: Stem cell research

Primary Source: Original facts published by the researcher

Secondary Source: An opinion article that may cite primary sources.

Topic: A presidential candidate

Primary Source: Their speeches and writings

Secondary Source: A book or articles about that person

Topic: **The Patriot Act**

Primary Source: A personal interview

Secondary Source: A book or articles about the Patriot Act

BIBLIOGRAPHY VS. WORKS CITED

<p>A Bibliography is an alphabetical list of everything you used to research and in preparing a paper. It contains all the works you actually used as well as a list of the other sources you read but didn't actually use in your project..</p>	VS	<p>A Works Cited page lists only what sources were actually used in your paper. If your research project does not include the actual sources used within the paper then it should not be on your Works Cited page.</p>
---	-----------	---

METHODS FOR TAKING NOTES

1. Quotation - This method requires you to record a particular sentence, paragraph, or idea using the author's **EXACT** wording. Include the page number on which this quote appears. Bracket that with quotation marks!
2. Paraphrasing - This technique requires you to express in your own words the basic thought conveyed by the author.
3. Summary - You condense a fairly long passage, writing the key facts and ideas in your own words. You should not change the meaning, make an interpretation, or inject your own meaning.
4. Commentary - These notes may be used to record your own personal commentary. Jot down comments, comparisons, ideas or questions as they occur to you, indicating the part of the outline to which each one relates.

MLA Handbook for Writers of Research Papers. The Modern Language Association of America, 2016.

Most of your notes should be in your own words (paraphrased), but there will be times when you will want to use the author's *EXACT* words (direct quotes). **Full credit for the author's words (whether quoted or paraphrased) must be given through what is called parenthetical documentation within your paper and then also on the Works Cited page.**

SAMPLE NOTE WITH PARAPHRASING

Prenatal Genetic Testing Rationale

Prenatal genetic testing is such an important tool for parents and doctors with positive benefits for everyone. This type of testing should stay relevant and available because of its huge impact. Each person who gets prenatal testing is taking control of their life and pregnancy and contributing to the future of medicine.

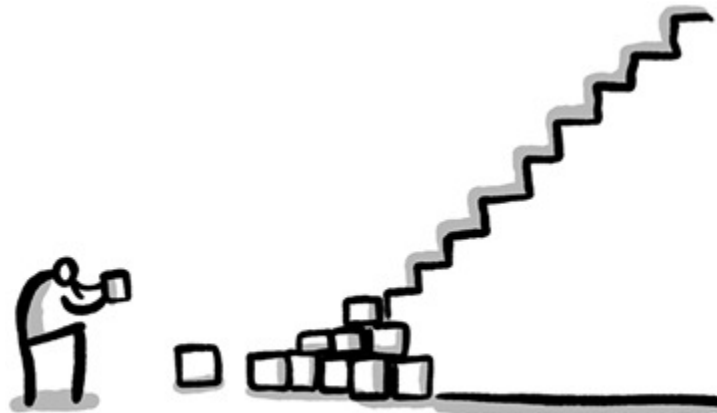
(Insert page number if there is one) ----- 124

SAMPLE NOTE WITH DIRECT QUOTE

Hereditary Disease Testing

“Genetic screening can be used to detect which individuals have a genetic makeup associated with particular hereditary diseases, such as sickle cell anemia, cystic fibrosis, and Huntington disease.”

124



Building your paper, one step at a time...

QUICK GUIDE TO MLA IN-TEXT CITATIONS

If you quote, paraphrase, or summarize a source in your paper, it need to be cited in the text.

An in-text citation contains just enough information to help the reader find the source on the Works Cited page. A typical in-text citation will include what comes first on the Works Cited page such as author or title, followed by the exact page number of the information used (if there is a page number). Always place the period outside the parenthesis.

Step 1: Create a Works Cited entry for each source you will use in your paper.

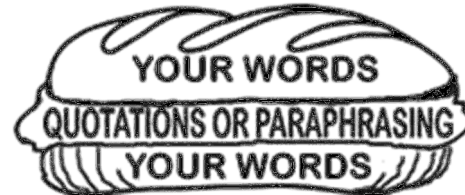
Step 2: Use the following chart to help you create in-text citations.

Step 3: Place citations in the text at the end of the sentence or section where the information was used.

TYPE	IN-TEXT CITATION	EXAMPLE
In-text citation with 1 author and page numbers(s)	Place the author's last name and page number in parentheses. Always place the period outside the parenthesis.	(O'Dell 81). or (O'Dell 81-82).
No page numbers	If a source has no page numbers, omit the page number. Most internet sources do not include pages.	("Everyday Victims"). or (Jones).
No author/ Anonymous author	If the source has no author, your in-text citation will use the title of the source that starts your Works Cited entry. The title may appear in the sentence itself or, abbreviated, before the page number in the parentheses. Follow the same format as the Works Cited entry, i.e., if the title is in quotes or italics then it should match - quotes or italics - the in-text entry. Titles can be abbreviated as long as it's clear which title on the Works Cited page you're referring to.	("Noon..." 508). or <i>(Faulkner's Day 25)</i> . Exclude any initial article in the title such as A, An, or The.
2 authors	If the entry on the Works Cited page begins with the names of two authors, include both last names in the in-text citation, connected by and.	(Doris and Day 23).
3 or more authors	If the source has three or more authors, include the first author's last name followed by et al.	(Burdick et al. 42).
Author mentioned in the sentence	If author is mentioned in sentence, include only the page number(s) in parentheses. Do not repeat the author's name. If you don't have a page number, then you can't use one.	O'Dell notes that all genome testing is not easily accessed (2).
Authors with the same last name	If you use works by more than one author with the same last name, add the author's first initial.. If the first initial is also shared, include the author's full first name.	(N. Baron 194). or (Nat Baron 194).
Sources by the same author	If using two or more sources by the same author, include a short abbreviated form of the source's title, separated by a comma.	(Green, "Colors" 4). and (Green, "Art" 41).
Corporate author	Abbreviate terms that are commonly abbreviated, such as Department (Dept.). If the corporate author is identified on the Works Cited page by the names of administrative units separated by commas, give all of the name in the in-text citation (i.e., United States, Dept. of Labor).	(United States, Dept. of Labor 147).

A NOTE ON “SANDWICHING”

You cannot just drop a quotation or paraphrased material into your paper. To fully utilize this information that you have determined is important enough for the reader to see, you need to introduce it. After putting that information into the body of your paragraph, acknowledge the source through parenthetical documentation. Then you need to write a few sentences reacting to this quoted or paraphrased material. Why is it important? What conclusions does it help you draw? Is the data significant? Does it add additional knowledge or clarification to your paper? EVERY one of your quotes or paraphrases needs to be sandwiched between your own words.



If a quotation exceeds more than 4 lines, set it off by beginning a new line, indent 10 spaces, double space, and do not use quotation marks. If you need to quote two or more paragraphs, indent the first line of each paragraph an additional two tabs (see example).

Genetic testing is a fairly new option for parents. In fact:

Persuasive arguments have occasionally been made to justify sex selection or for conceiving a child as a means to another's end. For a family devastated by cancer, it may seem appropriate to terminate a pregnancy if a fetus is found to carry a strong susceptibility gene. Our new capacities for choosing whether and which children to bring into the world require that we reconsider what responsible parenting means, what constitutes health and disease, and what our obligations are to the unborn, to those living with disabilities, and to society at large. In the face of these new possibilities, one cannot expect that moral beliefs about childbearing and parenting will remain static. (Smith 47).

In this area, there are moral and ethical questions that will continue to be discussed at all social and governmental levels...

AN EMBEDDED DIRECTION QUOTATION (example)

There are many accounts of parents who have faced this dilemma and “parents will have to figure out what they want to know and how to interpret the choices they're offered. It is critical, then, that the informed consent process for testing be exceptionally good. Genetic testing

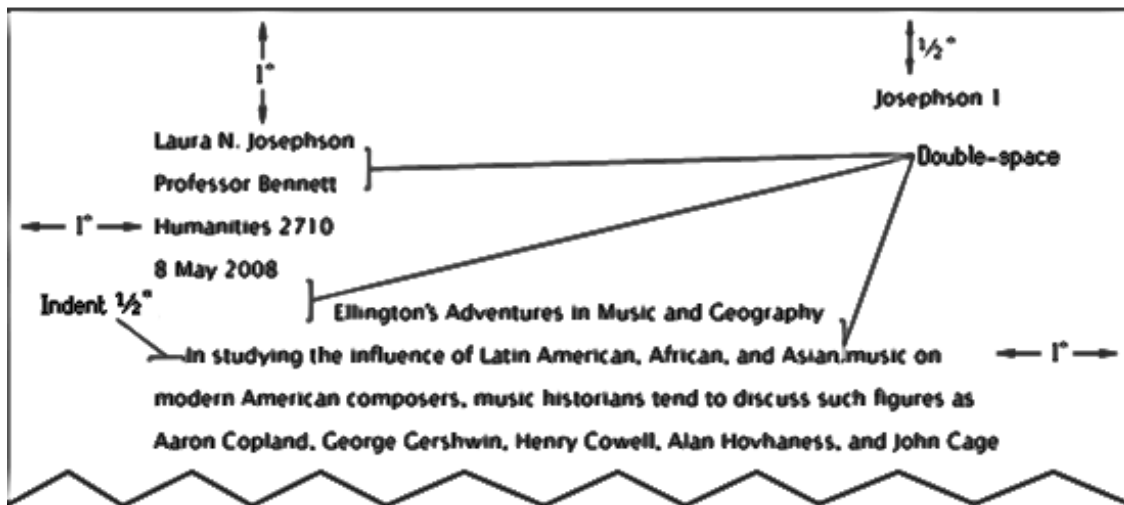
should be made distinct from other forms of pre-natal care; it should never be "just one more tube of blood" taken in the course of another whirlwind visit to the doctor (Schlager and Weisblatt 305). As time goes on, social scientists and medical professionals will and so on as you react to the quotation.

Especially with electronic sources, you will probably not have a page number! -

PUTTING YOUR PAPER IN FINAL FORM

In the following order you may have a title page (although many teachers will not require one!), your text, and a Works Cited and, perhaps, a Bibliography page. Your title page should include:

1. Your name
2. Your teacher's name
3. Your class
4. The date
5. Title of the paper which should be centered

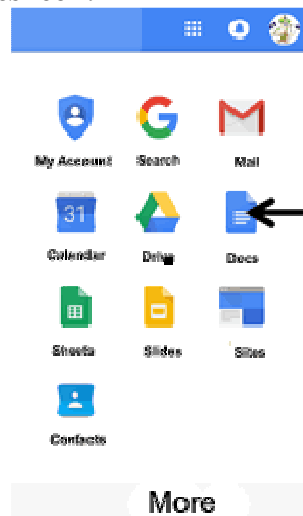


A research paper does not need a title page. Instead, beginning one inch from the top of the first page and flush with the left margin, type your name, your instructor's name, the course name, and the date on separate lines, double-spacing between the lines.

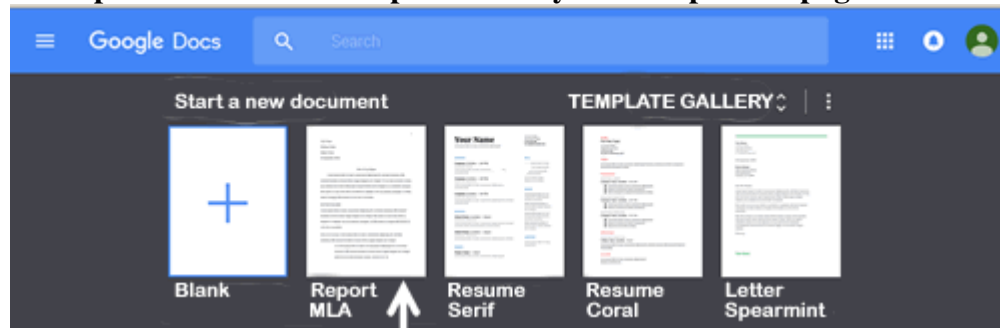
Double-space again and center the title. Double-space also between the lines of the title, and double-space between the title and the first line of the text. **Do not italicize** or **underline** your title. Use "Quotation Marks" or **boldface**, or type it in all CAPITAL LETTERS. Do not use a period after your title or after any heading in the paper.

FORMATTING YOUR RESEARCH PAPER IN GOOGLE DOCS (MLA 8)

-1. From the Google Drive page, select the Google Apps icon in the upper right corner. From there, select the Docs icon.



-2. Look for Report MLA in the Template Gallery at the top of the page.



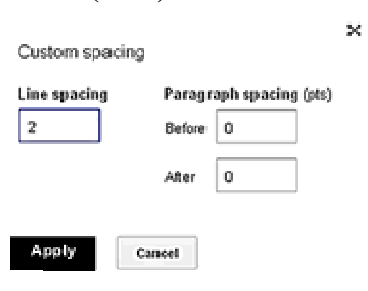
-3. The MLA 8 Google Doc will open and now it is time to type in your personal information.

- ✓ **Heading:** Replace the text “Your Name” with your actual name. Follow the same instructions for “Professor Name”, “Subject Name”, and the date. Be sure to use the Military style format for the date (ex. 09 November 2017).
- ✓ **Title:** Replace “Title of Your Report” with the subject or main topic of your paper. Make sure the text remains centered on the page. Do not underline the text or make the font bold.
- ✓ **Page Numbers:** Look for the number 1 in the upper right corner of the page. Place the cursor just before the number 1 and type in your last name. Be sure to hit the spacebar once to ensure there is a space between your last name and the page number.
- ✓ **File Name:** The default file name is “Report”. You can change this by placing your cursor in the text box at the top left corner of the page. You may wish to use the title of the paper or your name as the file name. This way if you are submitting the paper on Google Classroom, your teacher will know it is your paper.

- 4. You are now ready to begin typing your paper. You will see the default text is written in Latin. You can simply highlight all of this text and delete it before you begin typing your paper.

-5. The Works Cited page should begin on a new page at the end of your paper. MLA 8th Edition guidelines also require there to be a hanging indentation for each source. This means that the first line of each source is flush with the left margin, and any other lines that follow are indented ½ inch. You will see the document has several citations already formatted for you with the hanging indentation. If you cut and paste your citations into the document, it may not maintain the proper formatting. You must manually fix each citation by adjusting the following:

- ✓ the text color should be set to black
- ✓ make sure the setting for Highlight is set to “None”
- ✓ the font is set to Times New Roman, Size 12
- ✓ Go to Format → Line Spacing → Custom Spacing. Make sure Line Spacing is set to 2 and Paragraph spacing is set to 0 (zero) for both Before and After.



To adjust the setting for the hanging indentation, highlight all your citations, but be sure not to include the title Works Cited or Bibliography. Then follow the instructions below.

Formatting Works Cited pages in Google Docs

Type your citation list in alphabetical order at the end of your paper. It should be double spaced like the rest of your document. You do not need a hanging indent at this point. However, Works Cited should be centered at the top of the first citation page (no bold, indent, or underline). Remember, you can copy and paste and move your entries into alphabetical order before you continue to format.

- In the View menu, “Show Ruler” needs to be checked.
- Make sure you have the ruler visible on your document.
- Next, select all of your entries (highlight with your cursor).
- Go to the ruler at the top of the page where there is a blue inverted triangle.
- Click and drag that whole image over ½ inch to the right. Everything will move over. Don’t worry!
- Now click and drag the rectangle (within the triangle) to the first line indent ½ inch to the left. This will return the first line of each entry back to the original position.
- You can view the youtube video

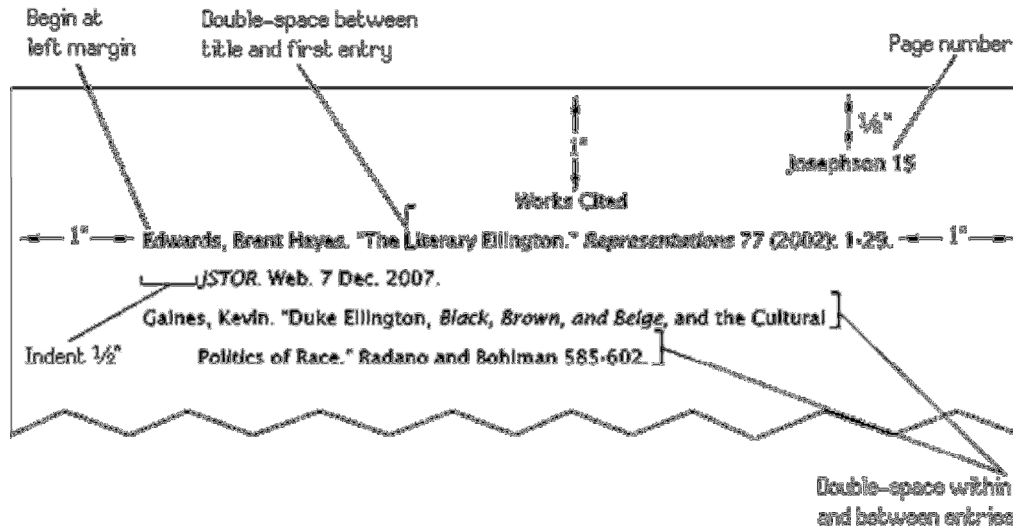
@<https://www.youtube.com/watch?v=DWnWy5qnkLk>



Top of Google docs page (close-up of ruler function)

RULES FOR WORKS CITED OR BIBLIOGRAPHY PAGES

The list of Works Cited appears at the end of the paper. Begin the list on a new page and continue to number each page, continuing the page numbers from the text. For example, if the text of your research paper ends on page 10, the Works Cited list begins on page 11. Center the title, Works Cited, an inch from the top of the page. Double-space between the title and the first entry. Begin each entry flush with the left margin; if an entry runs more than one line, indent the subsequent line or lines one-half inch from the left margin. Double-space the entire list.



Arranging Entries

Entries in a Works Cited list are arranged in alphabetical order. In general, alphabetize entries in the list of works cited by the author's last name, using the letter-by-letter system. In this system, the order of names is determined by the letters before the commas that separate last names and first names. Spaces and other punctuation marks are ignored. The letters following the commas are considered only when two or more last names are identical. If the author's name is unknown, alphabetize by the title, ignoring any initial *A*, *An*, or *The*. For example, the title *An Encyclopedia of the American Novel* would be alphabetized under *E* rather than *A*.

CITATION EXAMPLES

Gibaldi, Joseph. *MLA Handbook for Writers of Research Papers*. The Modern Language Association of America, 2016.

Your finished list should always be in ***alphabetical order*** by whatever is first on the line and ***double-spaced*** within ***and*** between the entries. Do not double, double space. The first line of the entry is even with the margin, and any following lines in each entry are ***indented one half inch***. All punctuation, spacing, and underlining should be used as per the example.

Remember, all bibliographic information may not be available for each source. Cite only what is available. All information needed from a book should be found on the front or back of the title page. Pay particular attention to where italics are used.



PRINT SOURCES

Book with one author (Treat a pamphlet as you would a book)

Author's last name, first name. *Title (in italics)*. Publisher, Copyright year (and a period if you used the whole book). If not, place a comma and add pp. and the range of pages used.

Fox, Stephen. *From Invasive to Non-invasive Prenatal Genetic Testing*. William Morrow and Co., Inc., 2017, pp. 14-27.

Two or more books by the same author (*Let's say the previous author, Fox, wrote another book that you also used. So use three hyphens to indicate author – followed by a period.*)

---. *Not Your Ancestors' Pregnancy*. Random House, 2016.

Book with two authors

Lerbinger, Otto and Albert Sullivan. *Bioethics and the Future*. Basic Books, Inc., 2014.

Book with three or more authors

MacNair, H.F., et al. *Healthy Babies*. Facts on File, 2015.

Book with editor or compiler

Fisher, William D., editor. *Controversies about Medical Ethics*. Doubleday & Company, 2015.

Personal interview by you, the researcher

Weisz, Edna. Personal interview. 11 Nov. 2018.

Essay, poem, or short story in an anthology

Lorca, Federico Garcia. "Muerte De Antocito El Camborio." *Poems and Selected Letters*,

edited and translated by Ann Rosalind Jones and Margaret F. Rosenthal, University of

Chicago Press, 1998, pp.35-37.

Article in a specialty encyclopedia or reference book, unsigned

“Prenatal Genetic Testing.” *The Encyclopedia of Modern Science*, Sharpe Reference, 2015,
pp. 800-11.

Signed article from a book (that includes original articles by varied authors) (If you use more than one article you will need a citation for **each** individual article. If you do not have an author, start with the article title).

Lange, Lawrence. “Tunnel Rats.” *The Encyclopedia of the Vietnam War*, ABC-CLIO Publishing, 2011, pp. 67-68.

Article, with author (reprinted in a book)

Chafetz, Morris E. “The Legal Drinking Age Does Not Prevent Teens from Drinking.” *Should the Legal Drinking Age Lowered?*, edited by Stefan Kiesbye, Greenhaven Press, 2013,
pp. 43-46. Originally published in *Huffington Post*, 18 Aug. 2009.

Reprinted article from a multi-volume publication

Author’s last name, first name. “Title of article.” *Name of Publication*. editor (if there is one), Publisher, Copyright year, pp. #. Originally published in *Name of publication*, copyright year.

Kendrick, Walter. “The Handmaid’s Tale.” *Contemporary Literary Criticism*, edited by Dan Fox,
vol. 9, Gale, 1992, pp. 7-12. Originally published in *Rolling Stone*, 13 Aug. 1990.

Newspaper article, unsigned

“Power of Prenatal Genetic Testing.” *The New York Times*, 17 Jan. 2015, p. A17.

Magazine article, signed (*Use a + after page number if pages are not consecutive*)

Fineberg, Felix. “Calling Prospective Parents!” *Newsweek*, 13 June 2016, pp. 66+.

SOURCES OTHER THAN PRINT

Standard Web Page

Web page author’s last name, first name. “Name of page.” *Publisher or sponsor of web site*. Date last updated. URL. Date accessed.

Antin, Sandro. “What is Genocide?” *History.com*, A&E Television Networks, 2009. www.
history.com/topics/what-is-genocide. Accessed 25 Sep. 2018.

(Note: if publisher’s name is not available, use n.p. as in “no publisher. If a date is not available, use n.d.).

A video on a web site

“Curiosity Rover Report (August 2015): Three Years on Mars!” *NASA’s Journey to Mars:*

Videos, edited by Sarah Loff, National Aeronautics and Space Administration, 30 July

2015, www.nasa.gov/topics/journeymars/videos/index.html.

Videorecording or DVD

Updates in Genetic Testing. Written, directed, and produced by Michael Gill, Home Visions,

1999.

An online video such as a Youtube clip

Name of author, compiler, editor, narrator, performer, or translator (use **one** in that order). “Title of clip.” *YouTube*, uploaded by (only put -uploaded by- if the poster is NOT the person to whom the video belongs, Date video was posted. URL.

Holbert, Patrick. “Our Life.” *YouTube*, uploaded by Erin Ross, 7 Feb.

2019. <https://www.youtube.com/user/PatMiscellaneous>.

Entire Book Online

Lawrence, Jerome. *The Beginnings of Genetic Testing*. Edited by George Parsons Lathrop,

Houghton, 2014, <http://www.bcponline.org/>.

E-book from Internet

Dronke, Peter. *The Power of Names*. Oxford: Oxford University Press, 2001, *netLibrary*.

www.netlibrary.com.proxy.elm4you.org/.

E-book owned by our library

Tucker, Spencer T., ed. *The Encyclopedia of the Vietnam War. Follett Shelf*, (editor here if there

is an author.) Follett, 2013, <http://reader.follettshelf.com/mobilereader/#/ktsID/14>.

Encyclopedia article online, signed

Enfield, David B. “Prenatal Genetic Testing.” *Encyclopedia Britannica*. [https://www.](https://www.britannica.com/topic/genetic-testing)

[britannica.com/topic/genetic-testing](https://www.britannica.com/topic/genetic-testing).

Encyclopedia article online, unsigned

“Genetic Testing.” *Encyclopedia Americana*. Grolier Online. [https://www.americana.com/](https://www.americana.com/topic/genetic-testing)

[topic/genetic-testing](https://www.americana.com/topic/genetic-testing).

Magazine article online, signed

Begley, Sharon. “The Benefits and Ethics of Prenatal Genetic Testing.” *Newsweek*,

24 Jul. 2014, <https://www.newsweek.com/379&&beID4892>.

Database Subscription Service (Magazine, newspaper, or reference book articles, signed)

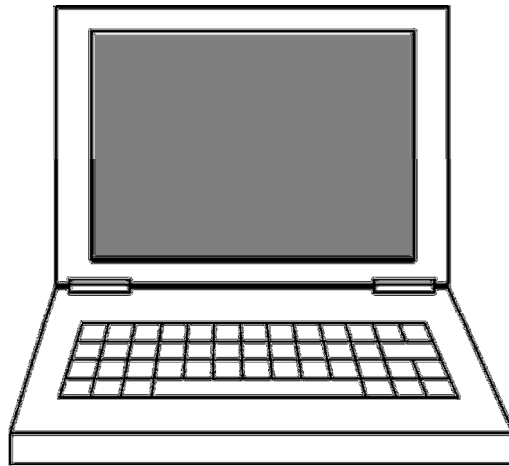
IF YOU ARE USING A DATABASE THAT GIVES YOU THE MLA CITATION FORMAT, COPY AND PASTE THE ENTRY INTO A WORD DOCUMENT FOR LATER USE!

Author's last name, first name. "Title of article." *Name of publication*, Date of publication: original page numbers. *Database used*. URL. Date accessed.

Broome, John. "The Ethics of Climate Change." *Scientific American*, vol. 298, no. 6, June 2008,

p. 96. EBSCO*host*, [search.ebscohost.com/login.aspx?direct=true&db=ulh&AN](http://search.ebscohost.com/login.aspx?direct=true&db=ulh&AN=31996809&site=ehost-live)

=31996809&site=ehost-live. Accessed 25 Dec. 2018.



MLA Format Research Paper Checklist

As you work towards the perfect MLA formatted research paper, consider the following checklist taken from a variety of resources.

Format:

- Typed in 12-point font, Times New Roman
- Double spaced
- Black ink
- One inch margins around
- No extra spaces between paragraphs (Paragraph settings are set to zero for before and after each paragraph).

Page One Mechanics

- Last name and page number in upper right corner of heading
- Heading looks like sample below:
John Smith

Mrs. Browne

English 12R

5 Apr. 2018

- Title centered
- Title not in caps, underlined, or quoted

Introduction:

- an interesting hook that captures attention
- a strong thesis statement
- no details/examples of the main points
- no phrases resembling, “In this paper you’ll learn...” or “After reading this paper...”

Body: Structure and Content

- All paragraphs relate to thesis.
- Main points relate in to the thesis.
- Logical organization
- Smooth, logical transitions used within and between paragraphs.
- Development of topics with examples/explanations
- Short quotes used in context

- Quotes relate directly to main points.
- Quotes are “sandwiched” appropriately.
- Conclusion summarizes main points.
- Proper length to cover topic
- Is well documented with parenthetical notations

Body: Documentation

- Quotation marks for quotes
- Parentheses for documentation: Author’s last name and page number ex. (O’Malley 209).
- All in-text citations match Works Cited list
- Each source listed on my Works Cited page is cited at least once within my paper.
- Credit is given each time that the information is used, even if it is paraphrased or summarized.
- Punctuation after closed parentheses
- Long quotes indented
- Long quotes double-spaced
- Long quotes, no quotation marks
- The majority of my sources come from credible print sources, such as books, scholarly journals, and periodicals.

Conclusion:

- Has a logical closing that ties together the main points of my paper.
- Contains a unique closing statement that does not repeat the opening statement and leaves the reader with something to think about.
- Does not contain phrases resembling, “In this paper you have learned...” or “Now that you’ve read my paper...”
- Has clearly proven that you have met the purpose of your paper
- Includes your reaction to your main topic

- Is the last paragraph of your paper

Mechanics:

- Margins are correct – 1 inch around
- No sentence fragments
- Punctuation is correct
- Spelling checked
- Capitalization correct
- No contractions
- No vague references
- Pronoun/antecedent agreement
- No unnecessary shifts of verb tense
- Correct subject/verb agreement
- Correct Prepositions

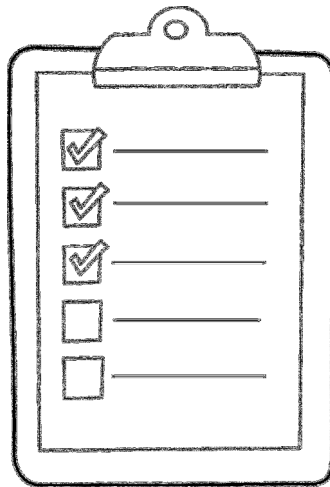
Works Cited:

- Title: Works Cited
- 1 inch from top

- Correctly capitalized, not underlined or quoted
- Entries are alphabetized according to the author's last name or first entry
- Entries are not numbered.
- Entries should be double-spaced.
- No extra spaces between entries
- Entries should be formatted with a "hanging indent"
- Entries are correctly formatted
- Everything on the Works Cited List is cited in the paper
- Title of books and periodicals are italicized consistently
- Titles of short works and articles are in quotes

Checklist adapted from: Maldonado, Danielle. "MLA Format Research Paper Checklist."

Maldonadoenglish.com. 2 Dec. 2016. <http://mrsaldonadosenglishclass.weebly.com/>.



Alyssa Galloway

Apostolico

English 12R

5 Apr. 2019

Prenatal Genetic Testing

If you could choose to find out if your unborn baby had a disease or genetic disorder you could plan ahead or fix things before they were born, would you? Prenatal genetic testing is done before birth to determine whether the mother or father is carrying genetic marker for inherited disorders that might run in their family and be passed on to their child. Testing for genetic diseases has been happening for at least the last five decades, and blood has been analyzed for multiple diseases, disorders, and conditions. With just a simple blood draw at an initial prenatal visit, doctors will be able to learn key genetic information about the fetus in utero. Prenatal genetic testing can screen for over 300 diseases, and that number is increasing daily. It can determine the risk for diseases in the future. Therefore it should be available to parents for preparation and decision making, and to doctors for medical advances in the field of genetics and current incurable diseases and disorders.

Prenatal genetic testing helps women prepare themselves for a child with disorders and disabilities, if that is the outcome of the test. More than 20 million families in the world have at least one member with special needs. For the parents and families of someone with special needs, there is always constant concern about the child's health, even before birth. "A simple blood test for Down's syndrome could prevent the deaths of hundreds of babies a year through miscarriage, a study has shown" (Knapton). These tests give parents a head start on giving their kids with special needs the care and medical attention they need. Not everybody agrees with the use of these tests though. Most people still find it hard to believe that the information you get out

of it is always right. “Because genetic screening will greatly expand the number of conditions and risks screened for, the potential for false positives will also be greatly expanded” (Timmermans). “In Britain, 35,000 women a year currently have invasive amniocentesis or chorionic villus sampling. Current methods usually miss around 15% of cases of Downs syndrome, experts said” (“Fetal Genetic...”). These invasive procedures can put the fetus at risk, and with such a large margin of error, it’s hard to believe that the risks are even worth taking. “Safety for the embryo must be a vital concern” (Darnovsky and Boyle).

There are multiple procedures that can be done to get the samples of the genetic material that will be tested. Some of these procedures include percutaneous umbilical cord blood sampling, chorionic villus sampling, genetic amniocentesis, and chromosomal microarray. “Because the predominant diagnostic prenatal test, amniocentesis, is invasive and carries some risk, only about 2% of pregnant women in the U.S. undergo it, roughly 100,000 per year” (Darnovsky and Boyle). While they all have their possible risks, there is so much information that each procedure can give to the parents and the doctor that may be vital to the preparation for the child, or to the decisions made concerning the pregnancy. Not only do these tests provide many possibilities for medical advances, but these tests are always improving and becoming safer for mother and child. “The reduction in invasive testing also means ... a reduction in miscarriages and loss of unaffected babies which is much better for parents” (Knapton).

This type of testing helps women decide if they want to go through with the pregnancy or choose to terminate. “Prenatal genetic testing allows scientists to test established pregnancies for genetic defects that then could be avoided by aborting the pregnancy” (Darnovsky and Boyle). While most people see all of the positive effects this testing has, there are other people

who look at it as a setback in human development. “The ability for parents to choose which offspring die and which live and what traits they will manifest is an awesome responsibility” (Darnovsky and Boyle). There are so many challenges that come with having a child with disabilities, and they are challenges not everyone is prepared for, physically, mentally, emotionally, and financially. Having an abortion might be the best option for women for many different reasons.

Not only do these tests show what problems the child will have after birth, but they also show some markers for women who are prone to miscarriages. “Dr. Stephenson...is also conducting research that has identified some possible genes that may make some people more prone to miscarriages” (Reddy). This is where the challenge of being emotionally prepared comes in. Some women might much rather have abortions early than risking a miscarriage/stillborn baby, and that is their decision to make. One of the largest reasons people are against this testing and abortion is because of their religious beliefs. “Before exploring the British objection, let me add an additional concern from a Christian perspective that regards these embryos as early human life, made in the image of God, possessing unique genes and the capability of continued human development” (Weaver). Most religions look at embryos as human life, and these prenatal tests not only lead to more abortions but it also gives you a chance to change or destroy the type of people and traits brought into this world, which is destroying God’s work. However, the ability to “destroy” God’s work is already available. The only thing the test does is give more information on what exactly they are aborting. This argument clearly stems from when people believe life actually begins. “However, with in vitro fertilization, blastomeric biopsy, and genetic screening, the embryos aren’t considered human subjects even though they are the earliest forms of childhood development and the beginning of lives whose

health and well-being will later be a concern to all” (Bailey). Choosing an abortion when you don’t believe you are fit to be a parent to someone with disabilities is the most responsible thing to do, and it shouldn’t be looked down on or banned. Not agreeing with abortion is a personal view, as is not agreeing with the testing, but just because you view the availability of procedures as wrong, you can’t take away other people’s ability to have them. “The responsibility for decisions affecting unborn children must remain in the hands of ... the prospective parents who are ultimately responsible for these decisions” (“Fetal Genetic...”).

Prenatal genetic testing gives doctors and geneticists amazing chances to study the human genome and try to find cures for currently incurable diseases and disorders. Each and every day, with every test and experiment done, doctors get closer to finding cures that don’t currently exist for many diseases. With this genetic testing, doctors can take blood samples and study the exact sites where disorders and diseases lie. “Last year, scientists proved that an entire fetal genome, or genetic blueprint, can be sequenced from a sample of the mother’s blood” (Timmermans). With the ability to see a whole entire fetal genome at once, there are now hundreds more conditions that can be seen and identified. “Genetic testing is available for over 800 conditions and such testing may be used prenatally to detect severe or less severe disorders...” (“Sex and Science”). Being able to see the exact locations of so many conditions gives doctors and geneticists such a unique and advanced opportunity to study and experiment with them. “In medical research, when new therapies are tested on human subjects, the welfare of the patient is a paramount concern” (Knapton). The end result of these experiments and tests hopefully will bring a cure. “Genetic screening can be used to detect which individuals have a genetic makeup associated with particular hereditary diseases, such as sickle cell anemia, cystic

fibrosis, and Huntington's disease" (Timmermans). The development of these tests open our eyes to where and how these diseases begin, they gives us insight to the site of these diseases and the genes that are directly associated as well.

Another advantage in medicine that these tests give is an insight to miscarriage and if there are any genetic associations to that. "Dr. Williams said the development in recent years of tools for genetic analysis, such as DNA and RNA sequencing, has made it possible to research miscarriage in new ways" (Reddy). "Between 50% and 80% of women with recurring miscarriages eventually have a successful pregnancy" (Reddy). With the new technology and understanding of miscarriages and its association with our genes, we can hope that the rate of women able to have a successful pregnancy after miscarriages will increase. "And advocates are pushing for even more. They envision expanding the technology to sequence every baby's genome, providing physicians with a full genetic profile to help predict disease risks, behaviors, and drug tolerance" (Timmermans). All of these advances in the medical field and genetics are huge steps towards cures and understanding of conditions that aren't completely known to us. That alone should allow everyone to realize that these tests are so much more than abortions and eradicating diseases, but also cures and better medicines to deal with the conditions that affect huge populations all around the world. These tests are such a positive tool for the human race, how it is now, and how it could be in the future.

Many people are fighting for genetic testing to be brought into the workplace, by being covered by insurance through your job. "The American College of Obstetrics and Gynecology now recommends offering prenatal testing to all pregnant women." ("Fetal Genetic..."). With insurance covering these tests, the likelihood that more people will get them and begin to understand and approve of them will increase. "Pre- and post- test genetic counselling must be

available from a qualified health professional, and paid for by the employer, regardless of the outcome of the test” (Darnovsky and Boyle). There are also hopes that these insurances will be covering other procedures and appointments that correlate with genetic testing. “Medical geneticists and genetic counselors providing prenatal genetic services strive to insure that counseling on reproductive issues is non- directive, private, and confidential” (“Fetal Genetic...”). With a strong support system behind every woman who decides to do the testing, it can be a very positive experience for everyone. One fear is that getting insurance companies involved will do more harm than good. “What I worry about is the day that insurance companies will insist on screening and refuse to cover children born with genetic diseases” (Weaver). While this concern raises good points about the motives behind insurance companies being involved, we have to keep in mind that these tests are meant for reasons so much greater than money and insurance and lawsuits. Bringing prenatal genetic testing into this world and into the workplace is a huge step to its acceptance and an understanding of useful technology we can access and put to constructive use.

Prenatal genetic testing is such an important tool available to expectant parents, and doctors, and has many positive benefits for everyone. It is important that this type of testing stays accessible and available. Each person who gets prenatal testing is taking control of their life and pregnancy, and they’re contributing to the future of medicine and genetics. This ability to get testing done and to make informed decisions earlier in a pregnancy is the future. It offers helpful tools to doctors and something simple like a sample of your blood to help identify diseases. Average people have suddenly become a huge part of the future of medicine. As long as our intentions stay pure when it comes to genetic testing, we should look at this amazing ability as a true blessing and embrace how far we’ve come in scientific advances.

Works Cited

- Bailey, Ronald. "Prenatal Genetic Screening Enhances Autonomy." *Medical Ethics*, edited by Noël Merino, Greenhaven Press, 2015. Current Controversies. *Opposing Viewpoints in Context*, link.galegroup.com/apps/doc/EJ3010053401/OVIC?u=nysl_me_put&xid=bdf9938d. Originally published as "The Moral Case for Designer Babies," *Reason*, June 2014. Accessed 29 Mar. 2019.
- Darnovsky, Marcy, and Minna S. Boyle.. "The Bleak New World of Prenatal Genetics." *Wall Street Journal*, 13 Jun, 2013, pp. p. A.17, *SIRS Issues Researcher*, <https://sks.sirs.com>. Accessed 28 Mar. 2019.
- "Fetal Genetic Testing Is Unethical." *Biomedical Ethics*, edited by Viki Wagner, Greenhaven Press, 2008. Opposing Viewpoints. *Opposing Viewpoints in Context*, link.galegroup.com/apps/doc/EJ3010112297/OVIC?u=nysl_me_put&xid=5b3aa318. Originally published as "Designer Babies: One Step Closer," 1 July 2004. Accessed 26 Mar. 2019.
- Knapton, Sarah. "Blood Test for Down's Syndrome may Save Babies." *SIRS Issues Researcher*, 06 Jun, 2015, <https://sks.sirs.com>. Accessed 1 Apr. 2019.
- Reddy, Sumathi. "Solving the Mystery of Miscarriages." *Wall Street Journal*, 16 Jun, 2015, pp. D.1, *SIRS Issues Researcher*, <https://sks.sirs.com>. Accessed 2 Apr. 2019.
- "Sex and Science; Reproductive Technologies." *Economist*, Feb, 2017, pp. 7, *SIRS Issues Researcher*, <https://sks.sirs.com>. Accessed 1 Apr. 2019.
- Weaver, Christopher. "Tough Calls on Prenatal Tests." *Wall Street Journal*, 04 Apr, 2013, pp. p. B.1, *SIRS Issues Researcher*, <https://sks.sirs.com>. Accessed 28 Mar. 2019.
- Timmermans, Stefan. "Too Much Information." *Los Angeles Times*, 19 Jul, 2013, pp. p. A.17, *SIRS Issues Researcher*, <https://sks.sirs.com>. Accessed 4 Apr. 2019.