Biology in the News Scrapbook Project

**PURPOSE:** One of the important goals of science education in high school is to help students learn how to make good decisions about public issues. Scientific information is disseminated to the public through a variety of media, including newspapers, magazines, broadcasting, the Internet, etc. For this project you will collect, read, and evaluate newspaper and news magazine articles and also learn from scientific writing of the past.

**A. THE COLLECTION:** You must collect 10 news articles. Each selected article must be about or related to some aspect of the curricular biology topics that are studied in class. These topics include scientific investigation (in biology), biochemistry, cytology, genetics and biotechnology, biological evolution, diversity, and ecology (includes environmental science). Topics outside of the curriculum must be submitted for approval. Articles must be *at least 500 words,* and selected from reliable news sources. Additionally, 2 scientific writings must be collected (at least 500 word essay or excerpt from book). These may include essays or an excerpt from a book, written by a renowned/famous biologist/author (such as Darwin, Mendel, or their contemporaries). There is no criteria for the time period in which these works have been written, but the older, the better so that we can compare discoveries and scientific thinking of the past with those of the present.

***The collection of news articles must all be written in 2016.*** For each article, you must do the following:

* Each article must be mounted to a numbered page (or pages) to be kept in a loose-leaf notebook. Use tape or glue *(no staples) - NEATNESS COUNTS*!! You may use a photo album if you like. Original articles (cut from newspapers) or a photocopy (of magazine articles) may be used.
* A minimum of 7 articles must be from newspapers or scientific journals (newspaper/journal name and date must be included), however only 2 articles in the collection may be from *The Chattanooga Times Free Press*. See the list of recommended journals.
* Articles from the Internet *must:*

-- be submitted to me for my approval. *(***NOTE:** *Internet articles without my initials do not count!)*

--clearly show that they come from a daily or weekly publication.

--include the date in which the article was written

* Each article must be summarized on ½ a page fixed to the page (preferably opposite to the article). Also provide the article with an alternate name. This summary must be typed or neatly written in ink or on unlined paper.
* The 2 scientific essays/writing must be written by an author of my approval or from the list (most famous biologists and published writers would fit this category). It must be a non-fiction piece related to our curriculum.

**B. THE ANALYSIS:** Once all your articles/essays have been collected, you must do the following:

* **Title Page** - Give your scrapbook a creative title reflecting something about the project. Include your name and block.
* **Organization Scheme** - your scrapbook must be organized in some topical manner (not chronological or by source) into *at least* 3 different categories (topics). This scheme need not be explained, but ought to be obvious. You must include a typed **Table of Contents** that shows your organizational plan (Headings) and each article.
* **Paper** – Choose one of the 2 scientific essays that you collected. Using 3-5 articles from your scrapbook, you must compare what has been learned about your topic in the past with what is currently being discovered. You will write a 2 page paper on this topic, which includes what you learned about the topic, why it interested you, your personal opinion about the information learned, its relevance to our class, and significance to society in addition to comparing past and present information. Information from the articles and essays are expected to be cited in the paper.
* **Presentation –** You must present your scrapbook and selected topic to the class and explain its significance to you and to society.The class will also publish our own scientific journal using the 2 page paper.

**C. THE GRADE:** Provided that you *adequately meet* the above criteria, the number of articles you have collected, presentation, and paper will determine your grade. See rubric for point values of items in the scrapbook.

**D. DUE DATES:**

One article with its half page summary will be due every Tuesday beginning January 26th except weeks where a scientific writing is due.

Scientific Writing /essays and summary due Thursday, February 25th and April 7th

2 page paper due with scrapbook

Scrapbook due/presentation: TBA (in May)

Students have the option to turn their articles and summaries in via a dropbox. Otherwise, each Tuesday, both article AND summary must be printed out and turned in at the beginning of class.

**Dropitto.me**

Dropbox instructions:

1. Make sure you include the URL of your article at the top of your half-page summary with your name, date, block, and the article number.

2. Make sure you save your document with your name and article number as part of the title.  For example John\_Smith\_Article\_2 or John\_Smith\_#2

3. Log on to [www.dropitto.me/soeungchov](http://www.dropitto.me/soeungchov)

4. The password is scrapbook.

5. All articles and summaries must be submitted to me by the beginning of class in a word document.

6. Any article submitted without a summary, without a URL, and without the correct saved title will not be graded.

List of (Some) Science Writers in Biology

Charles Darwin

Rachael Carson

Michael Pollan

Richard Dawkins

Stephen J. Gould

[Lewis Thomas](http://www.goodreads.com/author/show/81675.Lewis_Thomas)

Robert S. Root-Bernstein

Kari Bruwelheide

Douglas Owsley

Carl Zimmer

Daniel E. Lieberman

Sally Lehrman

Adam Summer

Kate Wong

James J. McKenna

Michael Balter

[Neil Shubin](http://www.goodreads.com/author/show/767633.Neil_Shubin)

[Matt Ridley](http://www.goodreads.com/author/show/3151.Matt_Ridley)

[Rebecca Skloot](http://www.goodreads.com/author/show/2940640.Rebecca_Skloot)

Oliver Sacks

[James D. Watson](http://www.goodreads.com/author/show/14313.James_D_Watson)

[Jerry A. Coyne](http://www.goodreads.com/author/show/647715.Jerry_A_Coyne)

Jane Goodall

Gregor Mendel

[Jared Diamond](http://www.goodreads.com/author/show/256.Jared_Diamond)

[Daniel C. Dennett](http://www.goodreads.com/author/show/1387.Daniel_C_Dennett)

[Sean B. Carroll](http://www.goodreads.com/author/show/22043.Sean_B_Carroll)

Jane B. Reece

[Bill Bryson](http://www.goodreads.com/author/show/7.Bill_Bryson)

[Erwin Schrödinger](http://www.goodreads.com/author/show/189820.Erwin_Schr_dinger)

Mary Roach

[Edward O. Wilson](http://www.goodreads.com/author/show/31624.Edward_O_Wilson)

Loren Eisley

This is a list of journals that are highly recommended and acceptable for journal summaries

**Highly Recommended Acceptable**

American ScientistAmerican Health

Newsweek

Popular Science

Audubon Psychology Today

Time

BioScience Unesco Courier

Bulletin of The Atomic Scientist U.S. News & World Report

Buzzworm Washington Monthly

Discover Whole Earth Review

Environment

E - The Environmental Magazine

Garbage

International Wildlife

Journal of The American Medical Association

Mosaic

National Geographic

National Wildlife

Natural History

Nature

New England Journal of Medicine

New Scientist

Nursing

Omni

Quantum

Science

Science Digest

Science News

Scientific American

Technology Review

Tennessee Conservationist

The American Biology Teacher

The Futurist

The Sciences

The Science Teacher

Wilderness

Some examples of acceptable websites

Cnn.com

Sciencedaily.com

Bbcnews.com

Npr.com

Biologynews.com

Etc.

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| **Name:**  **Date:** | | | |
| **"Biology in the News" Scrapbook Project** | | | |
| **Grading Rubric (10 Articles/2 essays Needed)**  **250 points** | | | |
|  |  | **Points** |  |
| **A. Organization (20 pts)** | |  |  |
|  | **Title Page** | **5** |  |
|  | **Table of Contents** | **10** |  |
|  | **Format/organized into categories** | **5** |  |
| **B. Articles (10 pts ea., up to 100 pts)** | |  | |

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| --- | --- | --- | --- | --- |
|  | **Summary** | **3/ADNC\*** | |  |
|  | **Appropriate (Y/N)** | **3/ADNC** | |  |
|  | **Length (<500 words)** | **2/ADNC** | |  |
|  | **Date and source, numbered** | **2/ADNC** | |  |
|  |  |  | | # Acceptable articles x 12 points  Each= points earned \_\_\_\_\_\_\_\_\_\_\_ |
| **C. Scientific Essays (20 points each total of 40 points)** | | | | |
| **Relevance 5 points** | | | | |
| **Choice of author 5 points** | | | | |
| **Summary 10 points** | | | | |
| **D. Paper (50 pts) See separate rubric** | | | | |
|  | * **2 pages** * **content** | **50** |  | |
| **E. Presentation (40 pts)** | | | | |
|  | **Oral Presentation of article and scrapbook to class (3-5 minutes)** | **28** |  | |
|  | **Visual presentation: Overall Neatness** | **12** |  | |
|  | **Total Points** |  |  | |
|  | **\*ADNC - Article Does Not Count** | | | |
| ***Suggestion: Collect more than the “minimum number” of articles in case some articles do not qualify for scoring points and/or to guard against penalties.*** | | | | |

Comments

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| |  | | --- | | Research Report : Biology in the News Paper | |

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| --- | --- | --- | --- | --- |
| CATEGORY | 4 | 3 | 2 | 1 |
| Introduction X1 | The introduction is inviting, states the main topic and previews the structure of the paper. | The introduction clearly states the main topic and previews the structure of the paper, but is not particularly inviting to the reader. | The introduction states the main topic, but does not adequately preview the structure of the paper nor is it particularly inviting to the reader. | There is no clear introduction of the main topic or structure of the paper. |
| Organization X1 | Information is very organized with well-constructed paragraphs and subheadings. | Information is organized with well-constructed paragraphs. | Information is organized, but paragraphs are not well-constructed. | The information appears to be disorganized. 8) |
| Amount of Information X2 | All topics (see assignment sheet) are addressed and all questions answered with at least 1 paragraph about each. | All topics are addressed and most questions answered with at least 2 sentences about each. | All topics are addressed, and most questions answered with 1 sentence about each. | One or more topics were not addressed. |
| Focus on Topic X1 | There is one clear, well-focused topic. Main idea stands out and is supported by detailed information. | Main idea is clear but the supporting information is general. | Main idea is somewhat clear but there is a need for more supporting information. | The main idea is not clear. There is a seemingly random collection of information. |
| Quality of Information (Content) X5 | Information clearly relates to the main topic. It includes several supporting details and/or examples. | Information clearly relates to the main topic. It provides 1-2 supporting details and/or examples. | Information clearly relates to the main topic. No details and/or examples are given. | Information has little or nothing to do with the main topic. |
| Conclusion (Organization) X1 | The conclusion is strong and leaves the reader with a feeling that they understand what the writer is "getting at." | The conclusion is recognizable and ties up almost all the loose ends. | The conclusion is recognizable, but does not tie up several loose ends. | There is no clear conclusion, the paper just ends. |
| Mechanics X0.5 | No grammatical, spelling or punctuation errors. | Almost no grammatical, spelling or punctuation errors | A few grammatical spelling, or punctuation errors. | Many grammatical errors. |
| Sources X1 | All sources (information and graphics) are accurately documented in the desired format. | All sources (information and graphics) are accurately documented, but a few are not in the desired format. | All sources (information and graphics) are accurately documented, but many are not in the desired format. | Some sources are not accurately documented. |
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**How to Summarize an Article**

1. **Read** the article.
2. **Re-read** the article. Underline important ideas. Circle **key terms**. Find the **main point** of the article. Divide the article into sections or **stages of thought**, and label each section or stage of thought in the margins. Note the main idea of each paragraph if the article is short.
3. Write brief summaries of each stage of thought or if appropriate each paragraph. Use a separate piece of paper for this step. This should be a  **brief outline** of the article.
4. Write the main point of the article. Use your own words. This should be a sentence that expresses the central idea of the article as you have determined it the from steps above.
5. Write your **rough draft** of the summary. Combine the information from the first four steps into paragraphs.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| bullet | **NOTE:** Include all the important ideas.   |  |  | | --- | --- | | bullet | Use the author's key words. | | bullet | Follow the original organization where possible. | | bullet | Include any important data. | | bullet | Include any important conclusions. | |

1. Edit your version. Be concise. Eliminate needless words and repetitions.  
   (Avoid using "the author says...," "the author argues...," etc.)
2. Compare your version to the original.

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| --- | --- |
| bullet | Do not use quotations, but if you use them be sure to quote correctly.  Indicate quotations with quotation marks. Cite each quotation correctly (give the page number). |
| bullet | Do not plagiarize. Cite any paraphrases by citing the page number  the information appears on. Avoid paraphrasing whenever possible.  Use your own words to state the ideas presented in the article. |

In the summary, you should include only the information your readers need.

1. State the main point first.
2. Use a lower level of technicality than the authors of the original article use. Do not write a summary your readers cannot understand.
3. Make the summary clear and understandable to someone who has not read the original article. Your summary should stand on its own.
4. Write a summary rather than a table of contents.  
   Wrong: This article covers point X. Then the article covers point Y.  
   Right: Glacial advances have been rapid as shown by x, y, and z.
5. Add no new data and none of your own ideas.
6. Use a simple organization:

|  |  |
| --- | --- |
| bullet | main point |
| bullet | main results: give the main results |
| bullet | conclusions/recommendations |

1. Unless the examples in the article are essential, do not include the examples in your summary. If you include them, remember to explain them.

Here is an easy way to begin a summary: In "[name of article]" [author] states . . . . [State the main point of the article first.] For example: In "Computer Chess"\* Hans Berliner states that the CYBER 170 series computer can perform well in a chess tournament.

Cite the source with correct [bibliographic form](http://www.class.uidaho.edu/adv_tech_wrt/resources/sources/bibliographic_APA_format.htm).  
\*Berliner, H.J. (1981). Computer Chess. Nature, 274(567), 745-748.  
[ author. article title. journal title. vol(number)/month: pages. ]

So when you write a summary:

1. State the main point first.
2. Emphasize the main stages of thought.
3. State the article’s conclusion.
4. Summarize rather than give a table of contents.

**Example:  
Wrong:**This article covers the topic of measuring the extent of global deforestation. The article discusses reasons for concern, the technique, the results, and the project’s current goal.  
**Right:**  
According to the author of “Seeing the Forest,” the extent of global deforestation was difficult to measure until satellite remote sensing techniques were applied. Measuring the extent of global deforestation is important because of concerns about global warming and species extinctions. The technique compares old infrared LANDSAT images with new images. The authors conclude the method is accurate and cost effective.

1. Summaries should be ½ a page