Citations for the Sciences

What sources are okay to use for my research?

Accessing Science Magazines and Journals with your School and Google Accounts:
Through the PDSB:

- Go to http://www.peelschools.org/students/library/secondary/Pages/default.aspx
- Click on 'Science in Context' and then 'Science Reference Centre'
    - If you are working from home, you will require the remote password 'athome'
- Choose the topic 'biology' and then a related topic (e.g. 'evolution')
    - You will then want to choose either 'magazines', 'news', or 'Academic Journals' and then begin browsing.

Through Google:

- Login with your PDSB Google Account:
    - Login: STUDENT#@pdsb.net
    - PW: Same as school computer login
- In the Google Search Engine, select 'Scholar' or 'News' and search either magazine titles (e.g. New Scientist), or a specific topic (e.g. microevolution), or a combination of both

Assuming you are using mostly electronic sources, you need to be very careful that the sources you are choosing are valid sources and all information can be verified. A general rule of thumb is that if it ends in .org, .gov, .ca, it is a valid source. Wikipedia and 'ask' cites are NOT valid sources and SHOULD NOT be used in the writing you submit to me this semester. You SHOULD be making use of the library's online database.

APA referencing:

APA referencing consists of two parts:

1. In-text citations
2. Works Cited list (at end of document)

In-text citations:

- In-text citations should **follow** all ideas that are not your own in written work.
- If more than one consecutive sentence comes from the same resource within one paragraph, the citation should follow the **first sentence** and the **last sentence** from that resource
- New paragraphs should have their own in-text citations (even if it is the same source as the previous paragraph)
- ALL sources that appear in your in-text citations should appear in your works cited list and vice-versa

Format for in-text citations:

One author
Biology is superior to physics (Jasiuk, 1983).
OR Jasiuk (1983) found…

Two authors
Biology is superior to physics (Jasiuk and Wieczorek, 2010).
OR Jasiuk and Wieczorek (2010) found... (cite both authors each time you cite work)

Three, four or five authors
Cite all authors the first time, but subsequently use only first author *et al.* (notice that *et al.* is in italics). If your source has more than five authors, just use the *et al.* version each time.

(The first time) Biology is superior to physics (Jasiuk , Skiba and Wieczorek, 2012).
(Subsequent times) Biology is superior to physics (Jasiuk *et al.*, 2012).

If the work has no authors
BEWARE OF ONLINE SOURCES THAT DO NOT HAVE AN AUTHOR. They are often invalid resources. With that said, if you are using a source without an author, the title of the work is used instead:
(Harper's illustrated Biochemistry, 2003)

On rare occasions, the author 'Anonymous' can be used:
Biology is superior to physics (Anonymous, 2013).

Corporate authors
If there are no author names present, but a group name is, cite the group name followed by the year of publication.

Biology is superior to physics (Department of Conservation, 2008).
If the group name is lengthy, you may shorten the name when using it in an in-text citation.

Works Cited list:

- List should be organized alphabetically by author.
- For non-electronic sources, use the information provided at http://www.bibme.org/citation-guide
- For electronic sources, use the following format in your works cited list (from http://www.bibme.org/citation-guide/APA/website):

Last Name, **First**. "**Page Title**." **Website Title**. Retrieved **Date Accessed**, from **Web Address**

Smith, J. (2009, January 21). Obama inaugurated as President. *CNN.com*. Retrieved February 1, 2009, from http://www.cnn.com/POLITICS/01/21/obama_inaugurated/index.html

The first author's name should be reversed, with the last name coming first, followed by a comma. First names and any middle names are given as initials, each followed by a period. A suffix, such as a roman numeral or Jr./Sr. should appear after the author's first and middle initials, preceded by a comma.

For a page with two or more authors, separate them by comma, and use an ampersand before the last author's name. If more than six authors are cited, abbreviate the seventh author and any others that follow with "et al."

Smith, J., & Doe, J. (2009, January 21). Obama inaugurated as President. *CNN.com*. Retrieved February 1, 2009, from http://www.cnn.com/POLITICS/01/21/obama_inaugurated/index.html

If an organization is the author, include the organization name, as normal, in place of the author names. If no author is available, begin the citation with the page title.

Obama inaugurated as President. (2009, January 21). *CNN.com*. Retrieved February 1, 2009, from http://www.cnn.com/POLITICS/01/21/obama_inaugurated/index.html

After the author names are listed, include in parentheses the publication date. List the year first, followed by a comma, and then the month and day. Place a period outside of the parentheses. In some cases, a specific date might not be available, and the date published may only be specific to a month or even year. Provide whatever date information is available.

Smith, J. (2009, January). Obama inaugurated as President. *CNN.com*. Retrieved February 1, 2009, from http://www.cnn.com/POLITICS/01/21/obama_inaugurated/index.html

If there is no publication date available, substitute the abbreviation "n.d." instead.

Smith, J. (n.d.). Obama inaugurated as President. *CNN.com*. Retrieved February 1, 2009, from http://www.cnn.com/POLITICS/01/21/obama_inaugurated/index.html

Include the full page title, which is followed by a period. Within the title, only capitalize the first letter of the first word or any proper nouns. Afterwards, cite the name of the website (which is italicized), followed by a period.

Conclude your citation by including the word "Retrieved", followed by the date on which you accessed the website (written in the format of "month day, year"). Follow the date with a comma, the word "from", and the web address of the website.

Sample with in-text citations:

Radioisotopes

Food irradiation is the process of exposing food to small controlled amounts of radiation (Canadian Food Inspection Agency, 2012). The types of radiations that are used in this process are gamma rays, x-rays, and electron beam radiation. X-rays and electron beam radiation is done through the usage of a machine while gamma rays occur naturally. Food irradiation kills microorganisms, without having to raise the temperature of the food by a significant amount (Canadian Food Inspection Agency, 2012). It prevents food borne illnesses, preserves foods, controls insects, delays the sprouting and ripening time and can also be used to sterilize foods used in hospitals (FDA, 2013). Food irradiation prevents food poisoning by reducing the level of harmful bacteria such as Escherichia coli and Salmonella (FDA, 2013). In food irradiation the radioisotopes cesium 137 and cobalt 60 can be used and cobalt-60 is commonly used (Keener, 2009). Gamma rays of cobalt-60 have enough energy to destroy disease-causing bacteria and bacteria that causes food to spoil (Keener, 2009). During food irradiation only gamma rays come in contact with the food and therefore the food is not radioactive (Health Canada, 2002). Furthermore, the limits placed in the amount of energy that can be used ensures that when the process is complete no radioactive energy remains in the food (Keener, 2009). When gamma rays come in contact with food some of the energy is absorbed by the chemical bonds. The bonds that break apart are highly reactive and unstable. These radicals instantaneously join with other compounds to form radiolytic compounds. However, these compounds are not harmful and are very similar to the compounds formed when a substance is heated, also known as thermolytic compounds (Keener, 2009). Food irradiation is becoming highly accepted by consumers in today's society (Health Canada, 2002).

Works Cited

Canadian Food Inspection Agency. (2012, March 21). Food Irradiation. Retrieved February 4, 2014, from http://www.inspection.gc.ca/food/information-for-consumers/fact-sheets/labelling-food-packaging-and-storage/irradiation/eng/1332358607968/1332358680017

Health Canada. (2002, November 25). Frequently Asked Questions Regarding Food Irradiation. Retrieved February 5, 2014, from http://www.hc-sc.gc.ca/fn-an/securit/irridation/faq_food_irradiation_aliment01-eng.php

Keener, K. M. (2009). Department of Food Science Food irradiation. Retrieved February 5, 2014, from http://ncsu.edu/foodscience/extension_program/documents/foodsafety_irradiation.pdf

U.S. Food and Drug Administration. (2013, April 23). Food Irradiation: What You Need to Know. Retrieved February 4, 2014, from http://www.fda.gov/Food/ResourcesForYou/Consumers/ucm261680.htm