**Scientific Methods Essay Assignment**

Students should compose an essay on the research topic they have chosen. The essay should summarize the scientific method used in their particular investigation. This means students should include:

--The research question and how it came about

--The relevant background information

--Possible hypothesis (including the null hypothesis)

--Materials and methods

--Results, including raw data and any data analysis

--Conclusions and Evaluation

Students must consult at least four sources for their work and show where the information was used in the text.

**Assessment will be based on:**

--The clarity of the writing

--The language used

--The quality of the sources

--The layout of the text

--The use of conventional scientific terminology

--The quality of the investigation

**Here is how to make a citation:**

The IB does not demand only one way to make citations and references in essays and other written assignments. The main key is to remain consistent.

For one sentence: Makley (2017) found that ibuprofen is linked to male infertility. / Makely found that ibuprofen is linked to male infertility (2017). / One study showed that ibuprofen use is linked to male infertility (Makely 2017).

For more than one sentence: This is an undoubtedly complicated topic with many viewpoints worth considering. Ultimately, one must accept that the vast majority of the evidence shows that vaccines are incredibly safe. (Smith 2016, Sampson 2017).

You can also show page numbers: (Smith 2016, 123).

In English, quotation marks are used for quotations. “This is the strongest evidence we have to date” (Smith 2016, 123).

**Making the Reference list:**

At the end of the essay, you should list the references you have used. Students should use discretion when citing websites, as there are not really any standards for publishing information online. If websites are used as sources, it is important to indicate the date the website was last accessed in the reference.

Author’s last name, first initials. Name of title. Journal /Publisher, page numbers.

For example:

Smith, J. 2014. How to Write an Essay. Penguin Publishers, London, 123-150.

Thompson, E. 2018. The Race to Save Sumatran Tigers. cnn.com/tigers. Accessed on 2.2.2020.