**AP Environmental Science**

**Ozone Lab Report**

**Instructions:** For this lab you will be writing a formal lab report. Lab reports may be written on loose-leaf paper or typed. Your lab report must include the following sections with boldfaced headings: Introduction, Background Information, Methods, Results, Discussion, and Conclusion. Your report should be written in prose; meaning well-constructed sentences and paragraphs that flow nicely with logical transitions. Be sure to use proper grammar and punctuation throughout. The outline below shows all the information that needs to be addressed in each section.

**Introduction**

* State the problem and/or question.
* State the purpose of your investigation, your comparative & testable question, your hypothesis, and your prediction.
* Provide a statement that explains the significance/relevance of investigating/learning more about this topic.

**Background Information**

*You will need to read some recent local media articles and cite them using MLA citation style.*

* What is ground level ozone is and how it is formed?
* Why is ground level ozone is a concern in terms of health and environment?
* Explain the current situation in Denver regarding ground level ozone, why it is a concern, and what can be done to reduce local and regional ozone levels.

**Methods**

* Explain the methods and procedures that you used to conduct this investigation; don’t get bogged down in too many details just provide a general idea of what the investigation involved.

**Results**

* Present the summarized data in writing and provide tables and graphs.
  + Provide a data table that shows the important details of the data collected and a bar graph that shows ozone levels and location.
  + Summarize your findings. Briefly describing the major findings of the investigation by writing a summary of the data shown in the table and graph. Highlight the most important values and trends shown in the table and graph by referring to them in the text.

**Discussion**

* In this section you will interpret the data. Compare the results from location to location. Did the ozone concentration vary from site to site? Why?
* In other words, you should make inferences (a conclusion reached on the basis of evidence and reasoning) and explain — based on what you have learned about ozone — why you observed the results that you did.
* You may need to revisit and/or expand upon some of the information that you explained in the background information section.
* Discuss any variables that may have affected your results such as temperature, relative humidity, wind, etc.
* Also, explain any limitations or errors that were troublesome or affected your data.

**Conclusion**

* In this section you will wrap-up your report by restating the purpose of your investigation, your comparative & testable question, and your prediction.
* Most importantly, you will either accept or hypothesis based on the data.
* Finally, make recommendations for further study. Ex. different times of day, longer study duration, more locations, different temperatures, different seasons, etc.

**References/Work Cited**

* Include MLA style citations in this section