

HERE GOES THE PROJECT TITLE!!!

**Title summarizes the project
Make the title catchy!**

YOUR NAME

DATE

PERIOD

ABSTRACT

- Abstract: a short summary of the entire project. (no more than 250 words)
- **Paragraph 1**– Purpose of the experiment. Describe the purpose and hypothesis.
- **Paragraphs 2**– Procedures used. Summarize the key points of the procedure and how the investigation was conducted. Do not list materials.
- **Paragraph 3**– Observation/Data/Results. Describe and explain the key results that led directly to the conclusions drawn. Graphs should not be displayed.
- **Paragraph 4**– Conclusions. Should be described briefly. The summary paragraph should state some possible applications and extensions.

PROBLEM STATEMENT

Problem Statement: What do you want to find out? It should be in the form a question.

EXAMPLE: How does sugar affect the life of cut flowers?

HYPOTHESIS

- **An educated guess about the problem statement based on research and prior knowledge.**
- What do you think might happen?
- Write as an “If...,then...” statement
- **Example: If sugar is added to the water, then the cut flowers will live longer.**

MATERIALS

- A vertical list of qualitative and quantifiable materials used to perform the experiment- using the metric measurement
- Ex:
- 10 g sugar
- 50 ml distilled water
- 6 cut carnations
- 1 metric measuring cup

PROCEDURES

- A step-by-step description of the experiment. Remember, the idea behind the procedure is to allow another scientist to replicate the experiment.
- Begins with an action word/verb
- Example:
 1. Mix 10g of sugar with 50ml of distilled water.

VARIABLES

Displayed in a list form

2 types:

1- Independent variable (manipulated)-the one you control or are changing.

- *Ex: the sugar*

2- Dependent Variable (responding)

- *Ex: the number of days the carnation lived*

CONSTANTS

The constants are things that stay the same throughout the experiment. Displayed in a list form

Example:

- Room temperature
- Sunlight
- Location of flowers
- Amount of water

CONTROLS

- **Controls** – the part of the experiment you do not change so that you can compare the results of your test.

DATA

- Record observations using a measuring tool
Ex: metric ruler, Celsius thermometer, balance
- Design a data table to keep track of your results.
- Ex: graphs, charts, written summaries and photographs (no faces in the photographs).

RESULTS

- **Results** – State the findings of the experiment based on the data you collected and analyzed.
How does sugar affect the life of cut flowers?
- **Ex:** The data revealed that the carnations given sugar lived “x” amount of days longer than the carnations given no sugar.

CONCLUSION

- **Conclusion** –Compare your results with your hypothesis. The conclusion should answer the following questions:
- What was investigated?
- Was the hypothesis supported/not supported by the data?
- What were the major findings?
- Why did this happen?
- How can the experiment be improved?
- What recommendations do you have for further study?

APPLICATION

- Application –state how the project and its results will be beneficial and who might benefit from this research. What field of study or persons could benefit from the information gained from this experiment.

BIBLIOGRAPHY

- Placed in the Report
- Put your bibliography of at least 5 different sources on the same page
- Refer to page 9 of the student packet for MLA format for citations.
<http://www.citationmachine.com>