Preparing the experimental research paper.

The research paper is the final presentation of all experimental work.

- Set the margins to 1 inch on all sides. Use 12-point Times New Roman and black ink.
- **Change the settings to double-space your paper.**
- Indent paragraphs ½” or add an extra line between paragraphs.
- Create a header that automatically numbers pages consecutively.
- **SAVE FILES. BACK THEM UP.**

Prepare a Title Page.

- Center the title of the experiment on the title page. Do not underline or place quotes around the title. Capitalize only the first letter of important words in the title.
- Type a five-lined single-spaced entry at the bottom right margin of the title page that has your name, school, teacher's name, class period, and the school year.

Write the introduction.

Drawing from the background research, write a paragraph or two with background information on the variables and research studies that directly relate to the research problem. Establish a rationale for the study by emphasizing unsolved problems or questions. Tell what question the experiment was designed to answer and the hypothesis that was tested. Do not use personal pronouns in this, or any other section, of the paper.

List materials and methods.

- Remember to include amounts, numbers, and concentrations when listing materials.
- **Number and list** the steps of the experiment. Write clear, complete sentences that could serve as instructions for someone else to do the experiment. If procedures were adjusted so that they were different from what was originally planned, write instructions for what was actually done.

Present the data.

Present the data in tables. Write observations in sentences.

Write a discussion. This section is the most important part of the paper.

- Tell how the data from different trials was combined and identify any other equations used; give the results of the calculations. Include units of measure.
- Construct graphs by hand that illustrate the data. Give them descriptive titles, and label the X and Y-axes. Include units of measure. Describe what the graphs show.
- Analyze the data; explain what it means. Conclusions should flow smoothly and logically from the data. Be thorough. Take the reader through your train of thought.

Write a conclusion.

Evaluate the hypothesis. Do not use proof, proved, or proven. The data either support the hypothesis or do not support the hypothesis. If possible, answer the question presented in the introduction. If not, acknowledge that the question was not answered and explain why not.

Prepare an Acknowledgements page.

Title the page Acknowledgements. Thank those who personally helped with the project.

Prepare a reference page.

- Title the page References.
- Use APA format. Include the ISEF rulebook and the Florida rules supplement in the references.
  - **Listing just a URL for a website IS NOT sufficient.**
- Single-space within a reference. Double-space between references. Use a hanging indent. Alphabetize the list of sources.