

Stages of Science Fair - Project Plan

I. Planning

A. Choose Topic (Introduction or Statement of Problem)

1. Select an idea that interests you.
2. Select an idea that you can complete in the allotted time.
3. Consider the level of difficulty of your topic.
4. Select a topic that is relevant and important.

B. Find Background Information

1. List potential sources of information.
2. Take care that your sources are reliable.
3. Learn and read about your topic.
4. Record information and cite sources. (Bibliography)

C. Develop Project Plan

1. State the hypothesis (based on background information)
2. Design of experiment
 - a. Determine what special equipment or facilities will be necessary.
 - b. List step by step procedure.
 - c. List all variables. State whether they are controlled variables or experimental variables.
 - d. Determine which form (bar graph, diagram, photograph, chart, drawing, poster, circle graph, line graph, table, etc.) will be used to display the data collected.
 - e. Write a paragraph explaining how you plan to analyze or interpret your data.

II. Doing

A. Carry out Experiment

1. Conduct the experiment safely.
2. Record data and observations accurately.
3. Take pictures if you choose.

B. Interpret Data

1. Examine the data and look for relationships
2. Construct graphs, charts, or data tables to express results.

C. Make Conclusions

1. Compare interpreted data to hypothesis.
2. Answer questions stated in problem.
3. Think about other questions generated by experiment.

D. Further Research

1. Was the experiment a success?
2. Can you improve your project? (What would you do differently next time?)

III. Presenting

A. Plan Display (keep in mind project requirements)

1. Decide what you want to display (some elements are required -see Project Display Board).
2. Decide on the materials you want to use.
3. Decide on how to display your project. (Sketch a rough draft)

B. Construct Display

1. Gather the materials and assemble the display.
 2. Lay out pieces of display, prior to permanent attachment. Check for balance.
- C. Final check for conventions (capitalization, organization, punctuation and spelling) and aesthetic elements (is your display attractive and interesting to the viewer, is it easy to understand?)