

## A Guide to Science Fair Projects

### Part 1: The Scientific Method and Literacy Enhancement

- “If a science project is to be successful, one employee what is known as the scientific method. Using the scientific method is not difficult, it only requires that one must question, design, experiment record and explain- “The New York Academy of Sciences.”
- A good science project should be true investigation. Sometimes a science project is confused with a construction or art project, in large model or drawing of a model from a hobby kids or impressive display of items these examples are neither experiment nor problem about it.

### The Scientific Method & \*Literacy Enhancement

\*Attention to grammar, spelling and sentence structure should be given to all responses.

#### Step 1: Identify a problem

Identify the problem that is to be investigated. This can be in form of a question or statement, and can be served as a title of a project. It should be well defined.

#### Step 2: Propose a Hypothesis

This is a statement about what you think will be the outcome/result. This is your *best guess*, which should be based on research, personal experience, or the experience of others.

#### Step 3: Literacy Enhancements, VOCABULARY

A list of words, with definitions, that are part of the investigation. Example: a project involving plant growth might include the term photosynthesis.

#### Step 4: Literacy enhancement, WHY DID YOU SELECT THE PROBLEM?

A well-organized paragraph which is fluent, easy to read, and engages the reader.

#### Step 5: Materials

Make a list of all the materials, including quantities used. Example: 2 cups of cold/hot water etc.

#### Step 6: Design an Experiment to Test your Hypothesis, PROCEDURES

- Research: collect information to help you investigate your problem. Use books, magazines, T.V., interviews, etc.
- Design an experiment: look at the problem and hypothesis and describe how best to proceed
- Conduct the experiment: list all the steps that you will take to “answer” your problem.

#### Step 7: Record the Data and the Results of the Experiment

Keep careful records of what is observed. Take pictures or make drawings, etc. Aside from writing explanation, the information or data collected can also be displayed as a chart or graph, etc.

#### Step 8: Literacy Enhancement, Analysis & Conclusion

Analysis: Think about it objectively; the results of the experiment with the respect of the original problem and your hypothesis. *In paragraph form*, explain three things that were learned from the project.

#### Step 9: References (See step 2 and step 6)

List the title and author books, magazines as well as all sources of information that were use to make your hypothesis and assisted in the research.