

Evaluation of Science Fair Project

Number:

Project Title:

_____ 1.0 Introduction of Problem; Creativity (15 points)

- 1.1 Adequate introduction of problem which includes:
 - Rationale or reasons for conducting experiment
 - Purpose of experiment
 - Clearly stated hypothesis
 - Demonstration of a clear understanding of applicable principles and processes
- 1.2 Creativity demonstrated through:
 - Choice of topic
 - Unique approach to problem

_____ 2.0 Experimental Design and Procedure (20 points)

- 2.1 Appropriate design for **typical** experiment including:
 - Manipulated or Independent variable
 - Levels of independent variable
 - Control Group
 - Adequate repeated trials
 - Responding or Dependent variable
 - Constants

Or: Appropriate design for **atypical** experiments such as case studies, correlations, etc.

- 2.2 Good description of procedure including:
 - All materials/equipment used
 - Clear, precise, replicable
 - Appropriate safety

_____ 3.0 Analysis of Data, Discussion, and Conclusion (15 points)

- 3.1 Appropriate analysis of data for the project such as:
 - mean, median, mode
 - measures of dispersion/variation such as range, frequency distribution, standard deviation
 - appropriate graphs that clearly illustrate the results
 - appropriate statistical analysis for the experiment and the age of the researcher
- 3.2 Discussion and conclusion includes:
 - Major findings
 - Discussion relating to hypothesis
 - Comparisons of results with other research
 - Good explanation of findings
 - Improvements and suggestions for further research

_____ 4.0 Display (20 points)

- 4.1 Attractive & legible
- 4.2 Accurate reflection of work
- 4.3 Creative

_____ 5.0 Interview (30 points)

- 5.1 Communicates scientific basis
- 5.2 Describes design principles
- 5.3 Explains data analysis
- 5.4 Explains findings
- 5.5 Recognizes limitations

_____ **Total Points**