



CALGARY YOUTH SCIENCE FAIR

Elementary Project: Scoring Guidelines

Section 1a: Scientific Content (Experimental Projects)

	Excellent	Good	Fair
Problem / Hypothesis	(9-10) The problem / hypothesis was exceptionally relevant and well considered. A significant amount of background research was done.	(7-8) The problem / hypothesis was relevant and well considered. Some background research was conducted.	(5-6) An appropriate problem / hypothesis was formulated based on existing knowledge. Little background research was done.
Method	(18-20) The experimental procedure and materials used are clearly laid out. The experiment was repeated to ensure accurate results, or a large sample size was used. Manipulated and responding variables are indicated and understood. An effort was made to control many outside factors that could affect the experiment. Log book contains a full record of the experiment, including all original data.	(15-17) The experimental procedure and materials are described. An attempt was made to repeat the experiment or have an appropriate sample size. Manipulated and responding variables are clearly stated. Some effort has been made to control external factors. Log book contains a record of the project.	(12-14) There is some description of the procedure and materials used. Enough observations were made to reach a conclusion. Manipulated and responding variables are mentioned. Controlled conditions are acknowledged. Log book contains at least a description of the tasks undertaken over the course of the project.
Analysis / Conclusions	(18-20) Significant analysis of the data has been conducted and clearly presented (charts, graphs, calculations, etc.). Analysis is sufficient to support any conclusions made. Most possible sources of error have been acknowledged.	(15-17) Some analysis has been done and presented, and is relevant to the stated problem / objective. Appropriate conclusions have been drawn. Sources of error have been considered.	(12-14) Data has been clearly displayed. Conclusions are relevant to the presented data. Conclusion refers back to the testable question.

Section 1b: Scientific Content (Non-Experimental Projects)

	Excellent	Good	Fair
Problem / Hypothesis	(5) There is an innovative problem that directs the study and is both relevant and logical in scope.	(4) The problem was relevant and well considered. It gave clear direction to the study.	(3) A good topic was formulated although a specific problem may not have been identified.
Method	(18-20) A variety of sources was used in the course of research. Care has been taken to verify the accuracy of the information. Information is comprehensive and covers all aspects of the problem. Alternate approaches or theories have been considered and analyzed. The log book contains a full record of the project, including all original data.	(15-17) Multiple sources were used in the course of research. Some effort has been made to ensure that the sources used are reliable and are related to the study. An effort has been made to cover all aspects of the problem. The log book contains a record of the project.	(12-14) Few sources were used in research, or the sources used were not independent, but the sources used are reliable. Enough information is present to address the problem. The log book contains at least a description of the tasks undertaken over the course of the project.
Analysis / Conclusions	(22-25) The research material was critically analyzed, interpreted, and synthesized. Conflict or inconsistencies in the research material was actively sought out and investigated. The conclusion clearly answered the problem.	(18-21) The research material was examined with some attempt at synthesis. Conclusions have been drawn based on the problem that was asked.	(15-17) A good effort to examine the research material was made. Conclusions relating back to the original topic were drawn.

Elementary Project: Scoring Guidelines (Cont'd)

Sections 2 – 4

	Excellent	Good	Fair
Section 2. Creativity and Insights	(22-25) Independent thinking, creativity and resourcefulness were used in the design, implementation and analysis of the project. All aspects of the project (for instance problems, improvements, and applications) have been considered.	(18-21) Emerging evidence of independent thinking and analysis of the project was shown. Aspects of the project (for instance problems, improvements, and applications) have been considered.	(15-17) There is an understanding of some aspects of the project and consideration given to problems, extensions, improvements and applications.
Section 3. Communication	(18-20) Presentation was clear, concise and logical. Questions were answered well. All important written and visual materials were available. All material from other sources was properly credited and a bibliography was provided.	(15-17) The major components of the project were presented and questions were answered well. All important written and visual materials were present. All material from other sources was properly credited.	(12-14) Perhaps with prompting a good effort was made and most questions were attempted. Most of the important written material was present. Some attempt was made to credit outside sources.
Section 4. Degree of Difficulty	(5) The problem approached was challenging beyond grade level, and a new understanding was gained.	(4) The problem was somewhat challenging and a good attempt was made to gain an understanding of it.	(3) The problem researched was appropriate to their grade level. A reasonable attempt to understand the problem was made.