



**New Brunswick Regional Science Fair
Judging Rubric**

Project Title:		Project Number:	
Student Names:			
Scientific Thought (50%)			
1	2	3	4
Project Type: DISCOVERY			
Devise and carry out experimental research or synthesize and analyze data from a variety of sources.			
Replicate a known experiment to confirm previous findings or collate data from a variety of existing sources without further analysis.	Extend a known experiment with modest improvements to the procedures, data gathering and possible applications or synthesize data from a variety of sources to confirm existing conclusions	Devise and carry out an original experiment. Identify the significant variables and attempt to control them or synthesize data from a variety of sources to strengthen or extend existing conclusions. Analyse the results using appropriate arithmetic, graphical or statistical methods.	Devise and carry out original experimental research in which most significant variables are identified and controlled or synthesize data from a variety of significant sources to develop new insight and draw new conclusions. The data analysis is thorough and complete. Conclusions are clearly described / presented and connected back to the data that justifies them. Statements about the significance of the work (including human benefit / advancement of knowledge / economic applications) are supported by the information presented and show awareness of context. Suggestions for future work are realistic and justified by the results of the current project.
Project Type: INNOVATION			
Develop and evaluate new devices, models, theorems, physical theories, techniques, or methods.			
Build a model or device to duplicate existing technology or to demonstrate a well-known physical theory or social/behaviour intervention.	Improve or demonstrate new applications for existing technology systems, social or behavioural interventions, existing physical theories or equipment, and justify them.	Design and build innovative technology, or provide adaptations to existing technology or to social or behavioural interventions; extend or create new physical theory. Human benefit, advancement of knowledge, and/or economic applications should be evident.	Integrate several technologies, inventions, social/behavioural interventions or design and construct an innovative application that will have human and/or commercial benefit. Performance of the prototype or method is evaluated completely and realistically. Honest comparisons are made to alternative or previous solutions, where possible. Statements about the significance of the work (including human benefit/advancement of knowledge / economic applications) are supported by the information presented and show awareness of context. Suggestions for future developments / versions are realistic and justified by the outcomes of the current project.



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Project Creativity and Originality (25%)			
1	2	3	4
<p>Little imagination. Simple project design. Partial plan to validates hypothesis. Minimal student input. A textbook type project.</p>	<p>Some creativity, Fair to good design. Sufficient plan to validate hypothesis. Standard use of common resources. Common topic.</p>	<p>Imaginative project. Good design. Above ordinary approach. Good use of resources. Creativity in design and topic.</p>	<p>Highly original project. Exemplary design. Original approach. Very resourceful and creative use of equipment and/or construction.</p>

Communication (25%)			
This level is based on six elements: 1. summary, 2. video, 3. interview/oral presentation, 4. project visual (presentation slides or physical representation), 5. project report, 6. sample logbook pages (data collection presentation).			
1	2	3	4
<p>Most or all of the six elements are simple, unsubstantial or incomplete. There is little evidence of attention to effective communication. In a pair project, one member may have dominated the presentation.</p>	<p>Some of the six elements are simple, unsubstantial or incomplete, but there is evidence of student attention to communication. A number of pieces may require clarification or explanation. In a pair project, one member may have made a stronger contribution to the presentation.</p>	<p>All six elements are complete and demonstrate attention to detail and substance. The communication components are each well thought out and execute although some further explanation may be required. In a pair project, both members made an equitable contribution to the presentation.</p>	<p>All six elements are complete and exceed reasonable expectations students at this age/grade. The visual display is logical and self-explanatory, and the exhibit is attractive and well-presented. The project report and logbook are informative, clearly written, and the bibliography extends beyond web-based articles. The oral presentation is clear, logical, and engaging. In a pair project, both members contributed equitably and effectively to the presentation.</p>