

<b>Judging Criteria for Scientific Thought</b>	<b>PART A: SCIENTIFIC THOUGHT (MAX 40 POINTS)</b>			<b>PART A SCORE</b>
	<b>EXPERIMENT</b>	<b>STUDY</b>	<b>INNOVATION</b>	
1) Clear Objective 2) Effective Approach 3) Proper recognition and manipulation of variables and/or use of controls. 4) Recognition and treatment of experimental errors. 5) Adequate supporting data 6) Clearly stated conclusions. 7) Reliable sources of information 8) Awareness of what further research is required	<b>Definition</b>	<b>Definition</b>	<b>Definition</b>	
	An investigation undertaken to test a specific hypothesis using experiments	A collection and analysis of data to reveal evidence of a fact or a situation or a pattern of scientific interest. This could include a study of cause and effect relationships or theoretical investigations of scientific data. Variables, if identified, are by their nature not feasible to control., but an effort to make meaningful correlation is encouraged	A project involving the development and evaluation of innovative devices, models, techniques or approaches in fields such as technology, engineering, or computers (both hardware or software)	
Judges Comments	<b>LEVEL I – (Acceptable)</b>	<b>LEVEL I – (Acceptable)</b>	<b>LEVEL I – (Acceptable)</b>	1 2 3 4 5
	Duplication of a known experiment to confirm the hypothesis. Hypothesis is totally predictable.  (Max 10 pts)	Study of existing printed material related to the basic issue.  (Max 10 pts)	Building models (devices) to duplicate existing technology.  (Max 10pts)	6 7 8 9 10
	<b>LEVEL II– (Fair)</b>	<b>LEVEL II – (Fair)</b>	<b>LEVEL II – (Fair)</b>	11 12 13 14 15
	Extend a known experiment through modification of procedures , data gathering and application  (Max 20 pts)	Study of material collected through compilation of existing data and through personal observations. Display attempts to address a specific issue.  (Max 20pts)	Makes improvements to, or demonstrates new applications for existing technological system(s) or equipment and is able to justify them.  (Max 20 pts)	16 17 18 19 20
	<b>LEVEL III – (Good)</b>	<b>LEVEL III – (Good)</b>	<b>LEVEL III – (Good)</b>	21 22 23 24 25
Devise and carry out an original experiment with controls. Variables are identified. Some significant variables are controlled.  (Max 30 pts)	Study based on observations and literary research illustrating various options for dealing with a relevant issue. Should include some statistical analysis of data.  (Max 30 pts)	Designs and build innovative technology or provides adaptations to existing technology that will have economic applications and/or human benefit.  (Max 30 pts)	26 27 28 29 30	
<b>LEVEL IV – (Excellent)</b>	<b>LEVEL IV – (Excellent)</b>	<b>LEVEL IV – (Excellent)</b>	31 32 33 34 35	
Devise and carry out an original experimental research which attempts to control or investigate most significant variables.  (Max 40 pts)	Study correlating information from a variety of significant sources which may illustrate cause and effect or original solutions to current problems through synthesis. Should include in-depth statistical analysis of data.  (Max 40 pts)	Integrates several technologies, inventions or designs and constructs an innovative technological system that will have commercial and/or human benefits.  (Max 40 pts)	36 37 38 39 40	

PART B: UNDERSTANDING AND PRESENTATION (MAX 24 POINTS)		
Presentation Logic, poise, confidence, fluency, enthusiasm		Understanding enthusiasm
Level I  (Max 8)	Student is unsure of the material or the process of the project and has difficulty answering questions about the project	1 2 3 4  5 6 7 8
Level II  (Max 16)	Student can summarize the project adequately and can answer the majority of questions about the project	9 10 11 12  13 14 15 16
Level III  (Max 24)	Student explains the project well and can answer all questions about the project clearly and logically.	17 18 19 20  21 22 23 24
PART C: ORIGINALITY (MAX 16 PTS)		
Topic Originality	1 2 3 4	
Originality of approach	1 2 3 4	
Resourceful use of material, Information, equipment	1 2 3 4	
Creative interpretation of data	1 2 3 4	
PART D: DISPLAY (MAX 20 POINTS)		
Layout logical and self-explanatory.	1 2 3 4	
Concise presentation.	1 2 3 4	
Neatness	1 2 3 4	
Appropriate and effective use of materials	1 2 3 4	
Dramatic value	1 2 3 4	

TITLE	
NAME	
SCHOOL	
JUDGES SUMMARY	
PART A: SCIENTIFIC THOUGHT	(Max 40 pts) <input type="text"/>
PART B: ORAL PRESENTATION	(Max 24 pts) <input type="text"/>
PART C: ORIGINALITY	(Max 16 pts) <input type="text"/>
PART D: DISPLAY	(Max 20 pts) <input type="text"/>
TOTAL SCORE (A+B+C+D)	<input type="text"/>
Judges Signature	_____
Judges comments	_____ _____ _____

<input type="text"/>	<input type="text"/>
Exhibit #	Judges Score
<input type="text"/>	<input type="text"/>
Age Class	Project Category
<b>JUDGING BOOKLET</b>	
<b>Lambton County Science Fair</b>	

## **Points that the Judges May Look For in Presentations.**

- 1 Display is easy to read at a distance. Use a large font for titles.
- 2 Title is clear. Make it fancy but make it readable.
- 3 Flow of the display is easy to follow.
- 4 Use graphs and/or pictures.
- 5 Hypothesis and conclusions should support each other.
- 6 Secure all the written work to the poster securely.
- 7 You may ask the judges what they are judging you for. It is useful to know because you can slant your presentation to their needs.
- 8 You may only have 5-10 minutes to make your presentation. Speak clearly and with understanding. Know your project. Try not to use crib sheets. Point to relevant data when explaining.
- 9 As a guideline, your project should contain:
  - Objective or Purpose
  - Hypothesis
  - Materials
  - Procedure
  - Results
  - Conclusions
  - Uses of Project or Results
  - References
  - Acknowledgements.
- 10 Have your logbook handy with all relevant copies of your references.