

Project number \_\_\_\_\_

**JUDGE'S FEEDBACK: GRADE 9-12**

Name of project \_\_\_\_\_

PROJECT REQUIREMENTS			Grade	Criteria		
Research Topic/Question	0	1	2	3	Comments	Your Score
<i>Uniqueness</i>	Question missing or not clearly stated. Answer may be obvious & readily found in scientific literature.	Question has some originality.	Very imaginative question.	Strikingly original and highly imaginative question.		
<i>Suitability for scientific experimentation</i>	Not suitable to controlled experimentation.	Somewhat suitable to controlled experimentation.	Suitable to controlled experimentation.	Suitable to controlled & rigorous experimentation.		
Experimental Design	0	1	2			
<i>Depth/ understanding</i>	Explained, but flawed logic or poor and unexplained design. The science behind the question & the scientific process is not understood.	Very clear & well designed but the science behind the question & the scientific process is not fully understood.	Exceptional & original design. Demonstrates clear understanding of the science behind the question & the scientific process.			
<i>Variables</i>	Lacks identification & control of variables.	Limited identification & control of variables.	Independent & dependent variables correctly identified & operationally defined. Controlled variables correctly identified.			
<i>Hypothesis</i>	Somewhat testable. Some background research present or absent. "If/then" statement may or may not be present.	Completely testable. Background research present. "If/then" statement present.				
					<b>TOTAL FOR PAGE 1</b>	

## JUDGE'S FEEDBACK: GRADE 9-12

<b>Data collection &amp; interpretation</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>Comments</b>	<b>Your Score</b>
<i>Good laboratory practices</i>	Little or no evidence of accuracy, repetition, use of control(s), and thoroughness. Insufficient number of data points.	Some evidence of accuracy, repetition, use of control(s), and thoroughness. Insufficient number of data points.	Accuracy, sufficient data points, repetition, use of control(s), and thoroughness all clearly evident.		
<i>Data analysis</i>	Little or no evidence of proper data analysis nor recognition of unexpected results.	Some evidence of proper data analysis and possible recognition of unexpected results.	Data analyzed properly, utilizing basic statistical tools, including recognition of unexpected results.		
<i>Conclusions</i>	Derived conclusions do not reflect data analysis & understanding of the underlying scientific principles.	Derived conclusions partially reflect data analysis & understanding of the underlying scientific principles.	Derived conclusions fully reflect data analysis & understanding of the underlying scientific principles.		
<i>Log Book</i>	Missing one or more: dates, times, places of experimentation, lists of materials, observations.	Includes dates, times, places of experimentation, lists of materials, observations.			
<i>Scientific literature</i>	Limited or no research of scientific literature.	Thorough research of the scientific literature evident.			
				<b>TOTAL FOR PAGE 2</b>	

## JUDGE'S FEEDBACK: GRADE 9-12

Clarity, organization & presentation	0	1	2	Comments	Your Score
<i>Display &amp; formal report*</i>  <i>*required</i>	Unclear presentation. Procedures not outlined in step-by-step fashion. Question & underlying scientific principles not accurately presented. Data not presented clearly. Missing or ineffective use of one of more: tables, graphs, statistics, etc.	Vague presentation. Procedures outlined in step-by-step fashion. Question & underlying scientific principles not accurately presented. Data not presented clearly. Missing or ineffective use of one of more: tables, graphs, statistics, etc.	Clear presentation. Accurately shows the question, underlying scientific principles & experimental procedure in a step-by-step fashion. Data presented effectively, including use of tables, graphs, statistics, etc.		
<i>Analysis &amp; Conclusions</i>	None or inappropriate analysis & conclusions.	Analysis and resulting conclusion(s) presented but unclear or inaccurate. Illogical flow from question and experiment.	Analysis and resulting conclusion(s) clearly presented. Logical flow from the question and the experiment. Conclusion well supported with strong conceptual links and novel application.		
<i>References &amp; Assistance</i>	References, sources of ideas & other assistance are incomplete or missing.	References, sources of ideas & other assistance are clearly identified.			
				<b>TOTAL FOR PAGE 3</b>	
<b>ADDITIONAL COMMENTS</b>				<b>TOTAL POINTS FOR PROJECT</b>	

16-24 Award of Excellence (Blue)

8-15 Honorable Mention (Red) 0-7

Award of Participation (White)