

## Judging Rubric      Discovery / Grades 6-9

Undertake an investigation to test a scientific hypothesis using the experimental method. At least one independent variable is manipulated; other variables are controlled.

Project	Students
Judge's name (please print)	Judge's signature

*PARTS A-H CAN BE DONE BEFORE THE DAY OF THE FAIR BY GOING ONLINE AND VIEWING THE PROJECT BOARD AND CAN BE REFINED AFTER DISCUSSION WITH THE STUDENTS. ASSIGN A SCORE FOR EACH SECTION AND THEN ADD THE SCORE TO THE TOTALS TABLE.*

<b>PART A: QUESTION / HYPOTHESIS – 5%</b> Assign a score between 1 and 5	<b>SCORE /5</b>
Do the student(s) have a clear, testable question or hypothesis?	

<b>PART B: ORIGINAL CREATIVITY – 5%</b> Assign a score between 1 and 5	<b>SCORE / 5</b>
<ul style="list-style-type: none"> <li>Is the project an original idea?</li> <li>Do they show resourcefulness and creativity in the design, use of equipment, construction and analysis?</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>Does the project simply repeat an experiment or study found in books or on the internet?</li> </ul>	

PART C: SCIENTIFIC THOUGHT / METHODS	
Assign a score between 1 and 10	SCORE /10
Experiment <ul style="list-style-type: none"><li>Have they identified multiple variables that they are controlling?</li><li>Have they chosen a variable to change that is quantifiable?</li><li>Have they completed multiple trials?</li></ul>	
Study <ul style="list-style-type: none"><li>Have they gathered information from a variety of reliable sources?</li><li>Have they made their own observations through gathering information (e.g. surveys)</li><li>Have they explained their procedure to choose sources, gathered this information, and analyzed the data?</li></ul>	
PART D: SCIENTIFIC THOUGHT / RESULTS	
Assign a score between 1 and 10	SCORE /10
Experiment <ul style="list-style-type: none"><li>Have they recorded their results in clear tables and graphs?</li><li>Have they completed appropriate data analysis (e.g . calculated the mean)?</li></ul>	
Study <ul style="list-style-type: none"><li>Have they summarized their findings and used appropriate graphs or tables?</li><li>Have they provided detailed descriptions of qualitative information?</li></ul>	
PART E: SCIENTIFIC THOUGHT / CONCLUSIONS	
Assign a score between 1 and 10	SCORE /10
Experiment / Study <ul style="list-style-type: none"><li>Do their conclusions match the data?</li><li>Have they identified possible sources of error and suggested improvements if they were to repeat the project?</li><li>Have they identified next steps if they were going to continue the research?</li></ul>	
PART F: SCIENTIFIC THOUGHT / REFERENCES	
Assign a score between 1 and 5	SCORE / 5
Experiment / Study <ul style="list-style-type: none"><li>Have they used multiple valid sources?</li></ul>	

<b>PART G: PROJECT BOARD: ABSTRACT / SUMMARY</b>		<b>SCORE / 5</b>
<b>Assign a score between 1 and 5</b>		
Experiment / Study		
<ul style="list-style-type: none"> <li>Is it a clear, concise, and accurate summary of the project?</li> <li>Does it include the question, methods, results, and conclusion?</li> </ul>		
<b>PART H: PROJECT BOARD: SLIDES</b>		<b>SCORE / 5</b>
<b>Assign a score between 1 and 5</b>		
Experiment / Study		
<ul style="list-style-type: none"> <li>Is there enough information to describe the project and are the slides attractive and easy to follow?</li> </ul>		

*PARTS I-M WILL BE DONE ON THE DAY OF THE FAIR  
ASSIGN A SCORE FOR EACH SECTION AND THEN ADD THE SCORE TO THE TOTALS  
TABLE*

<b>PART I: PRESENTATION 10%</b>		<b>SCORE /10</b>
Assign a score between 1 and 10		
Experiment / Study		
<ul style="list-style-type: none"> <li>Did the student(s) clearly outline their reasons for doing the project?</li> <li>Was their presentation well organized and easy to follow?</li> <li>Were they well prepared and did they show their enthusiasm and interest in the project?</li> <li>If there were two students involved in the project, did they both take part in the presentation?</li> <li>Did they cover important details?</li> </ul>		

<b>PART J: ABILITY TO ANSWER QUESTIONS</b>		<b>SCORE /15</b>
Assign a score between 1 and 15		
Experiment / Study		
<ul style="list-style-type: none"> <li>Do their answers show an understanding of the project (knowing why the methods were used, what the results show, and limitations of their data)?</li> <li>If there are two students, do they both answer questions?</li> </ul>		

PART K: POSTER		SCORE /15
Assign a score between 1 and 15		
Experiment / Study <ul style="list-style-type: none"> <li>Is the display board well organized and visually appealing?</li> <li>Does it communicate key components of the project (question, methods, results, conclusion)?</li> </ul>		

PART L LAB BOOK 5%		SCORE /5
Assign a score between 1 and 5		
Experiment / Study <ul style="list-style-type: none"> <li>Does the lab book include all results and observations (including dates and names)?</li> </ul>		

Add Subtotals from each part and add these to get the **total score awarded**

TOTALS			SCORE
PART A	QUESTION / HYPOTHESIS	/5	
PART B	ORIGINAL CREATIVITY	/5	
PART C	SCIENTIFIC THOUGHT / METHODS	/10	
PART D	SCIENTIFIC THOUGHT / RESULTS	/10	
PART E	SCIENTIFIC THOUGHT / CONCLUSIONS	/10	
PART F	SCIENTIFIC THOUGHT / REFERENCES	/5	
PART G	PROJECT BOARD: ABSTRACT / SUMMARY	/5	
PART H	PROJECT BOARD: SLIDES	/5	
PART I	PRESENTATION	/10	
PART J	ABILITY TO ANSWER QUESTIONS	/15	
PART K	POSTER	/15	
PART L	LAB BOOK	/5	
TOTAL		100	

## M: FEEDBACK FOR THE STUDENTS

### Strengths

- 

### Recommendations

-