

A1: Experiment - Scientific value

Clearly stated? Provided direction for the project? Can the student explain why they found it interesting?

Problem or Hypothesis

Judging Tally Sheet - Junior and Senior

Project Number

Complete <u>one of A1, A2 or A3</u> according to Project Type plus <u>sections B and C</u> for each project. Give each point a rating of either Weak (1), Fair (2), Good (3) or Strong (4).

	Evidence of background reading or other background research? Multiple, independent sources used and verified? Were sources used credible? Were outside sources properly credited?		
	Experimental Design Was the experiment appropriate at testing the hypothesis? Understanding of controls? Understanding of variables that can be manipulated? Adequate replication? Understanding of the effect of variables that cannot be manipulated?		
	Recording/presentation of Data Did student record data adequately during experiment? Did student understand the technology used in collecting data? Did the student identify key points and concepts? Data presented clearly (figures, graphs, tables)? Was data presented in the appropriate format?		
	Inferences from Data Did student understand sources of error? Were errors accounted for? Did the student understand the limitations of the experiment? Were extrapolations of data appropriate? Was appropriate statistical analysis performed? Does student understand statistical significance? Did the student show critical thinking and analytical skills? Acknowledgments of unknowns and areas that require research?		
	Conclusions Justified by data? Clearly presented? Could the student relate results to their Problem or Hypothesis? Was help with the project adequately acknowledged (e.g. parents, teachers)?		
_	A2: Innovation - Scientific value		
	Problem or Hypothesis Clearly stated? Provided direction for the project? Can student explain why they found it interesting?		
	Background and Sources Evidence of background reading or other background research? Multiple, independent sources used and verified? Were sources used credible? Were outside sources properly credited?		
	Innovation Design Did the project's design address the original objective? Did the student establish criteria for the success of the project?		
	Construction Did the student create/gather appropriate technology to meet the objective? Were problems encountered and overcome?		
	Testing Did the student design adequate tests of the project? Did the student record, analyze and present testing data adequately? Did testing reveal shortcomings of the design? Did testing lead to improvements of the design?		
	Results and Conclusions Did the project's outcome meet the objective? Did the student understand the limitations of the project? Was help with the project adequately acknowledged (e.g. parents, teachers)?		

A3: Study - Scientific val	<u>ue</u> F	Project Number			
Problem or Hypothesis					
Clearly stated? Provided direction	on for the project?				
Can student explain why they fo					
	and the edbject interesting.				
Background and Sources					
Evidence of background reading					
	sed and verified? Were sources u	used credible?			
Were outside sources properly of	credited?				
Study Design					
	ition/understanding of dependent	/independent			
	nfounding variables? Adequate re				
		plications			
Recording and Presentation o					
Did student record data adequat					
Did student understand the tech	nology used in collecting data?				
Did the student identify key poin					
	graphs, tables)? Was data prese	nted in the			
appropriate format?	graphic, tablee). Was data proce	niod in tho			
Inferences from Data					
	of error? Were errors accounted	tor?			
Did the student understand the I	imitations of the study?				
Were extrapolations of data app	ropriate?				
	ysis performed? Does student un	derstand			
statistical significance?	, or por or mour 2000 or accordance				
	and areas that require research?)			
Did the student show critical thin	iking and analytical skills?				
Conclusions					
Justified by data? Clearly preser					
Could the student relate results	to their Problem or Hypothesis?				
Was help with the project adequ	ately acknowledged (e.g. parents	s, teachers)?			
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D. Crastivity					
B: Creativity		1	,	1	
Resourcefulness and Imagina	ition				
Imaginative or creative choice of	f topic? Was the project original a	and novel?			
Resourceful or imaginative use					
Imaginative interpretation of data					
	<u>u:</u>				
Future Work					
Suggestions for improvement?					
Suggestions for future research/	/tastina?				
	rtosting:				
	rtesting:				
Suggestions for applications?					
Suggestions for applications?					
Suggestions for applications? C: Communication	recuiring:				
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