

Junior and Senior Divisions

CRITERIA	Beginning Level (1)	Fair (2)	Good (3)	Excellent (4)
<u>Creativity of Design:</u> <ul style="list-style-type: none"> Originality of all elements: the question(s), research approach, protocol and use of equipment 	Project not innovative; very conventional in all elements	Project somewhat innovative and unconventional in some project elements	Project is mostly innovative and unconventional in most project elements.	Project is very innovative and unconventional in almost all project elements
<u>Creativity of Interpretation:</u> <ul style="list-style-type: none"> Originality of data analysis 	None of the data analysis is innovative or original	Some of the data analysis is innovative and original	Most of the data analysis is innovative and original	Almost all data analysis is innovative and very original
<u>Scientific Method:</u> <ul style="list-style-type: none"> Clarity of question(s) Clarity of hypothesis Clarity of procedures 	The question(s), hypothesis, and procedure are not explicitly stated; unclear in many areas	Some elements (question, hypothesis, and procedures) explicitly stated; somewhat clear	Most elements (question, hypothesis, and procedure) are explicitly stated and clear	The question(s), hypothesis, and procedure are all explicitly stated; very clear
<u>Scientific interpretation</u> <ul style="list-style-type: none"> Validity of conclusions based on limitation of data Correlation of data to answering the question Variables and controls discussed 	Conclusions not explicitly stated; little correlation of data to the question, little discussion of variables and controls	Some conclusions explicitly stated; somewhat connected to the question; identification of variables but no controls	Most conclusions explicitly stated and connected to the question; most variables and controls identified, the limits of the data are not discussed	Limitations of the data are explicitly discussed; question is thoroughly answered with defined variables and controls.
<u>Completeness:</u> <ul style="list-style-type: none"> Question(s) answered in depth Thorough documentation cited Knowledge of research in the field 	Limitations of answer not addressed at all; very little or no documentation and description of other related research	Answer does not address full range of conditions; limited documentation; unsure of other research	Answer applies to a restricted set of listed conditions; other documentation cited, discusses other research when prompted	Answer applies to a broad range of conditions; documentation cited and thorough knowledge of other research expressed
<u>Display and Oral Presentation:</u> <ul style="list-style-type: none"> Clear and concise oral interview Effective visual display of project details 	Presentation confusing or unclear Graphics ineffective in support of conclusions	Presentation marginally clear when prompted; graphics are very general and lack details	Presentation mostly clear; student answers most judge questions well; graphics are somewhat detailed	Presentation very clear; student effectively answers all judge questions; graphics detailed and comprehensive
<u>Independence:</u> <ul style="list-style-type: none"> Balance between student's use of own skills and reliance on adult participation. 	Student appears to totally rely on adult input for all aspects of project; does not fully understand project concepts	Student appears to rely on adult's input in conceiving ideas, answering questions; is uncertain on projects concepts	Student appears to rely on adult mostly to refine question and answer; student understands most project concepts	Student appears to have conceived and completed project independently and fully understands projects concepts