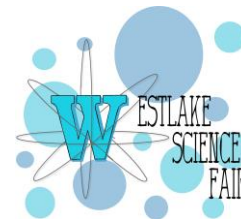


2021 Main Rubric



Proposed Research = A potential project that a student could conduct given proper resources and facilities based on a thorough review of previous literature. The purpose is to demonstrate sound scientific thinking and insight, regardless of current mentor status. The results should be related results from previously published work or data that the student has already collected.

Guidelines		Score (1 = lowest)									
P R E V I O U S L I T E R A T U R E	1. Introduction & Background <ul style="list-style-type: none"> Provides background information on the topic to inform and engage Indicates significance of topic Uses and explains key scientific terms 	1	2	3	4	5	6	7	8	9	10
	2. Review of Literature / Gap in Research <ul style="list-style-type: none"> Fully cites and discusses at least 3 previous scientific studies Explains current lack of knowledge ("Gap") that previous literature is missing 	1	2	3	4	5	6	7	8	9	10
P R O P O S E D R E S E A R C H	3. Goals / Hypothesis / Engineering Goals <ul style="list-style-type: none"> Thoroughly discusses connections between previous literature ("Funnel Effect") and proposed research States goals of proposed research States and justifies hypothesis of proposed research 	1	2	3	4	5	6	7	8	9	10
	4. Methodology / Materials <ul style="list-style-type: none"> Explains a potential methodology for proposed research Explains how key steps in methodology would address the proposed goal/objective <i>If controls and variables are necessary in proposed research, clearly explains both</i> <i>If a survey is necessary in proposed research, questions adequately address the goal</i> 	1	2	3	4	5	6	7	8	9	10

----- Rubric continues on back -----

P R O P O S E D R E S E A R C H	5. Results <ul style="list-style-type: none"> Shows related/potential results and/or data of proposed research in tables, charts or graphs Displays proper titles, labels, units, and citations 	1	2	3	4	5	6	7	8	9	10
	6. Analysis / Discussion <ul style="list-style-type: none"> Student clearly and adequately explains expected results of proposed research 	1	2	3	4	5	6	7	8	9	10
	7. Conclusion / Application / Future Focus <ul style="list-style-type: none"> Summarizes expected research findings Explains potential impact of findings Identifies next steps and future focus 	1	2	3	4	5	6	7	8	9	10
8. Student Understanding / Questions & Answers <ul style="list-style-type: none"> Fully answers questions, further demonstrating understanding Speaks well and clearly explains all aspects of project while answering questions Shows definite/deep understanding of material 		1	2	3	4	5	6	7	8	9	10
9. Verbal Presentation <ul style="list-style-type: none"> Presents material in a clear, organized manner Demonstrates enthusiasm Rarely says: “um,” “ah,” “like,” etc. 		1	2	3	4	5	6	7	8	9	10
10. Slide Presentation <ul style="list-style-type: none"> Text is clearly visible with readable formatting Information is “bulleted” without excessive amounts of text All words are spelled correctly Neat, organized, appealing visual presentation All figures, photographs, and diagrams are properly cited 		1	2	3	4	5	6	7	8	9	10