

Project No: _____

Participant(s) Name(s): _____

Judge's No: _____



WRSTEF JUDGING RUBRIC AND TALLY SHEET

Experimental Project - An investigation undertaken to test a scientific hypothesis using experimentation, usually featuring the identification and control of variables.

Please contact a member of the WRSTEF Committee before judging if you have difficulty choosing whether the Experimental or Non-Experimental Rubric should be used.

Please use the following scale:

- 5 Excellent
- 4 Good
- 3 Satisfactory
- 2 Weak
- 1 Poor
- 0 Not Present

1. SCIENTIFIC METHOD

PROBLEM/HYPOTHESIS

1. Existing knowledge and background research were integrated into the formation of the problem/hypothesis ----- 0 1 2 3 4 5
2. The hypothesis related to the problem was clearly stated and provided direction for the project ----- 0 1 2 3 4 5

METHOD

3. Experimental design was clearly described and appropriate for studying the problem----- 0 1 2 3 4 5
4. Controlled, manipulated and responding variables were identified and understood ----- 0 1 2 3 4 5
5. Repetition of tests and/or appropriate sample size were used to achieve reliable results ----- 0 1 2 3 4 5
6. Logbook recorded progress of the project including detailed procedures, results and original data ----- 0 1 2 3 4 5

ANALYSIS/CONCLUSIONS

7. Appropriate methods were used to present and analyze data (e.g. graphs, charts, statistics) ----- 0 1 2 3 4 5
8. Sources of error and experimental limitations (e.g. the effects of uncontrolled variables) were understood ----- 0 1 2 3 4 5
9. Conclusions were related to the problem/hypothesis and were supported by the data presented ----- 0 1 2 3 4 5

2. CREATIVITY AND INSIGHT

1. The problem was approached with originality ----- 0 1 2 3 4 5
2. Independent motivation, design and thinking were demonstrated ----- 0 1 2 3 4 5
3. Resourceful use of equipment and/or materials was shown ----- 0 1 2 3 4 5
4. Improvements that could be made to the project were described ----- 0 1 2 3 4 5
5. Practical applications and future research in the project area were indicated ----- 0 1 2 3 4 5

3. COMMUNICATION

1. The oral presentation was clear, logical and concise ----- 0 1 2 3 4 5
2. Answers to questions were clear and demonstrated understanding of the project ----- 0 1 2 3 4 5
3. All required written information including credits, citations and applicable ethics/consent forms were presented 0 1 2 3 4 5
4. The visual display was effective, logical and referred to in the presentation ----- 0 1 2 3 4 5
5. The topic was presented with enthusiasm and feedback receptively received ----- 0 1 2 3 4 5

4. DEGREE OF DIFFICULTY

1. The project demonstrated a level of difficulty far beyond the student's grade level ----- 0 1 2 3 4 5

JUDGING DECLARATIONS

1. My level of expertise in the topic area of this project ----- 0 1 2 3 4 5

0 – no knowledge in this field, 1-some knowledge, 2 – basic knowledge, 3 – average knowledge, 4 – very knowledgeable, 5 -expert

2. As per the WRSTEF Conflict of Interest Policy, I have no conflicts in judging this student(s) ----- 0 for agree