

## Broadcom MASTERS Evaluation Scoring Criteria

### 1. Scientific Thought / Engineering Goals (1-5)

- a. Does the student(s) demonstrate knowledge of the scientific process in design and method? For engineering projects: Did the student have a clear objective and a tested solution?
- b. Is there evidence of data collection and/or multiple trials that support the student's evaluation process and conclusions?
- c. Is the student(s) able to thoroughly explain the project, understand the limitations of his/her research and provide possible ideas for furthering the research?

### 2. Creativity, Originality and Enthusiasm: (1-5)

- a. Does the project show creative ability and originality in the question asked, the approach to solving the problem and/or in the analysis of the data?
- b. Does the project demonstrate student independence and initiative? Are there elements of the project that are student-driven? How much did the student accomplish relative to the resources available to him/her?
- c. Do the essays demonstrate enthusiasm for the project and for science and/or engineering more generally?

### 3. Mastery of Science, Technology, Engineering and Math (STEM) Principles: (1-5)

- a. In the STEM Principle questions in particular and in the description of their project more generally, was the student able to "deconstruct" their project and provide examples of how they used science, technology, engineering and math in completing their project?
- b. Was the student able to give applicable examples of use of scientific and engineering principles in their everyday life?

### 4. Overall Impression (1-5)

- a. Was the project "sound" in design and demonstrate student independence?
- b. Did the student comprehend the project – its limitations and how it utilized scientific process, technology, engineering and math skills?
- c. Did the student demonstrate creativity and enthusiasm for science and/or engineering throughout the application?

Sci Thought/ Eng Goals	Creativity/ Enthusiasm	STEM Principles	Overall	TOTAL
1 - 5	1 - 5	1 - 5	1 - 5	
5	5	5	5	20

I would add a side note to aide your teachers to always have the students conduct many trials and show the data to support. That is something the judges panel really looks for to determine the top 30 ~