



BIG BANG JUDGING RUBRIC

How will the winners be determined?

Preliminary Rounds — Each project will be judged by three separate judges based on the online submission based on an abbreviated judging rubric (see the Judging Rubric below).

Students whose projects received the highest average score in each age group will be asked to attend the live Big Bang C-STEM Fair at Saint Agnes on April 10.

Final Competition — Finalists will compete at the Big Bang C-STEM Fair on April 10, 2021, using the detailed Judging Rubric below. Judging will include interacting with the judges and answering their questions. The highest scoring project in each category will win an award. Top overall projects in each age group will win the top three awards.

Judging rubric

Originality: 15 Points

- The project appears student-initiated and driven
- Research idea is original/unique (i.e. not something you see at every science fair)
- Research idea is relevant

Scientific Method OR Engineering Process: 40 points

- **Scientific Method**

- The hypothesis is clearly stated
- Method tested hypothesis
- All variables were held constant that could be reasonably held constant
- Control group was included if applicable
- Enough trials were performed to be confident of results
- Variables were measured as objectively as possible
- The method was not biased for or against any variable(s)

- **Engineering Process**

- Engineering goal or problem is clearly stated
- The initial prototype or method is described
- Student performed sufficient rounds of designing, testing, adapting the design, testing again, etc. ...
- A robust set of tests were used to determine if the goal is met or the problem is solved

Communication: 45 points

- **Display board**

- Information is grammatically correct
- The display is visually appealing
- The display is well organized

- **The student has three reputable sources**

- **Project notebook is organized**

- The project notebook includes regular, thorough entries throughout the project

- **Presentation**

- Student can give a good, 2-3 minute summary
- Student can describe the project without reading from the board
- Student can answer judge's questions knowledgeably
- The student makes eye contact
- The student maintains good posture
- The student appears presentable (well dressed)
- The student is master of the project and information