

**GRADES K - 5**  
Judging Criteria  
**MAKER DIVISION**  
Engineering Invention

Project Title: \_\_\_\_\_

Sequence  
Number: \_\_\_\_\_

**ACADEMY OF SCIENCE – ST. LOUIS SCIENCE FAIR**  
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| Project Elements  | Description of Criteria   | Possible Score | Score |
|---|---|----------------|-------|
| <b>PRESENTATION &amp; LOGBOOK</b>   |   |                |       |
| Judging components under this heading can be in either the logbook and/or presentation. |   |                |       |
| Title & Description   | Title of project and overview of project  | 0-5            |       |
| Asking Questions & defining problems  | Define the problem that you are trying to solve. Identify the need and constraints. Student considers: what do I want to design; who is it for; what do I want to accomplish; what are the project limitations and requirements; what is my goal.   | 0-5            |       |
| Research the problem  | Research the problem. Student clearly defines why project is important or "how can I make this better." Student documents researching what products or solutions already exist, or what technologies might be adaptable for their solution. Shows evidence student understands project. Research is age-appropriate. Research can be interviews with knowledgeable adults as well as reliable internet sources and books. | 0-10           |       |
| Imagine   | Develop possible solutions. Student describes ideas for solution to the problem. Student describes "brainstorming" of possible ideas.   | 0-15           |       |
| Plan  | Select one solution and make a plan to develop your project. Describe your plan.  | 0-10           |       |
| Create  | Build a prototype. Describe (or show through photos) the design process. Student demonstrates an understanding of the subject matter or innovative/creative way of approaching their project. <i>(Note to student: Items that are valuable or valued by the student are not to be displayed – use photos/illustrations instead)</i>   | 0-20           |       |
| Test & evaluate prototype. Improve & redesign as needed                                 | Test and evaluate prototype. Student describes testing process. Student explores possible improvements and redesign if time permits. If student does not have time for a redesign, should describe possible alternate ideas for success. Points will NOT be taken off for prototype failure as we encourage open-ended problem solving as students nurture their ability for creative innovative solutions.               | 0-15           |       |
| Safety Guidelines   | Students should provide detailed descriptions on how they followed the safety guidelines in their logbook and/or presentation.  | 0-5            |       |
| Signed Safety Form  | All projects are required to have a signed safety form uploaded with their project.   | 0-5            |       |
| Total Possible Score  |   | 90             |       |
| <b>TOTAL SCORE: _____</b>   |   |                |       |