



## 2025-2026 STEAM Fairs Maker Division – Engineering/Invention Project Description & Rubric Preschool

### Project Overview:

Engineers and inventors design new things to solve problems and help people. For this project, you will think of a problem in your everyday life and make an invention to help. You will follow the steps of the Engineering Design Process:

1. **Ask** – What problem are you trying to solve?
2. **Imagine** – Brainstorm lots of ideas.
3. **Plan** – Pick one idea and make a drawing or plan.
4. **Create** – Build a model (a prototype that shows your idea).
5. **Test & Improve** – Try it out! What works? What can you make better?

Keep track of your ideas in an engineering notebook with drawings, teacher notes, and reflections. Use art to bring your invention to life with colors, shapes, and decorations that make it unique.

### Tri-Fold Board Expectations:

<b>Maker Division - Engineering/Invention Preschool Display Board</b>		
<b>What is the Problem?</b>	<b>(Title)</b> (Description)	<b>Test</b>
<b>Ideas &amp; Planning</b>	<b>My Prototype</b> (Show pictures, drawings, and the final prototype with labels)	<b>What worked?</b>  <b>What could we change?</b>

### Engineering Notebook Expectations:

- Define the problem
- Sketches from planning
- Material lists
- Procedures for building
- Notes and Data from testing
- Reflection



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 Preschool

Student Names:					Grade:	
Teacher's Name				Project Title:		
<b>Category</b>	<b>Exceeds Expectations</b>	<b>Meets Expectations</b>	<b>Approaching</b>	<b>Beginning</b>		
<b>Title &amp; Description (10)</b>	<b>10</b> Has a creative title and clear description of the invention	<b>8-9</b> Has a clear title and short description	<b>5-7</b> Has a title but description is hard to understand	<b>0-4</b> No title or description		
<b>Define the Problem (10)</b>	<b>10</b> Clearly explains the problem and who it helps	<b>8-9</b> Explains the problem with some details	<b>5-7</b> Mentions a problem but with little detail	<b>0-4</b> No problem explained		
<b>Ideas &amp; Planning (10)</b>	<b>10</b> Shows many ideas through drawings or teacher notes	<b>8-9</b> Shows some ideas before building	<b>5-7</b> Shows only one idea with little detail	<b>0-4</b> No ideas or planning shown		
<b>Engineering Notebook (15)</b>	<b>15</b> Notebook has clear drawings/notes showing ideas and changes	<b>11-14</b> Notebook has some drawings or notes	<b>7-10</b> Notebook has very few drawings/notes	<b>0-6</b> Notebook missing or mostly empty		
<b>Create &amp; Build (20)</b>	<b>20</b> Prototype is neat, complete, labeled; shows effort and care	<b>15-19</b> Prototype is mostly neat and complete	<b>10-14</b> Prototype is incomplete or messy	<b>0-9</b> Prototype not built		
<b>Art &amp; Creativity (15)</b>	<b>15</b> Uses art (colors, shapes, textures) in a very creative way; invention looks expressive	<b>11-14</b> Uses some colors, shapes, or textures	<b>7-10</b> Shows a little artistic effort	<b>0-6</b> Shows no artistic effort		
<b>Test &amp; Improve (10)</b>	<b>10</b> Prototype tested; explains what worked and what could change	<b>8-9</b> Prototype tested; explains what was learned	<b>5-7</b> Prototype tested but reflection is unclear	<b>0-4</b> Prototype not tested		
<b>Sharing About My Invention (10)</b>	<b>10</b> Explains the invention clearly with details; uses drawings, words, or labels	<b>8-9</b> Explains the invention with some details	<b>5-7</b> Explains a little about the invention	<b>0-4</b> Cannot explain the invention		

**\*\*Students/Teachers are to complete the top portion of this form and make sure it is attached to the STEAM Fair project for judges to reference, all scores are entered through the shared digital scoring form.\*\***