

## **Invention Convention Project Guidelines**

\*Can be completed individually or with a partner (Must prove division of labor by writing what each person will be completing and submitting it to the teacher prior to the topic due date )

### **PROBLEM**

Ask a question about an everyday problem you would like to solve with a practical solution. Inventions can be almost anything created to solve a problem or meet a need. Examples include school supplies, cups, cell phone holder, cooking utensil, processes to clean water, toy for a child or pet or a device to move objects, etc. ( think of a simple existing invention and make a modification)

### **POSSIBLE SOLUTIONS**

Describe possible solutions you imagined during your brainstorming. Identify the solution you chose to try, explaining why you chose it.

### **PLAN & CREATE**

- **Diagram:** Make a blueprint or plan. Draw a diagram or use a computer and label it so that other people can understand your design.
- **Materials:** List the materials, including amounts, you will need for your invention. As you collect the materials, consider how you might borrow, make, or use inexpensive materials.
- **Build:** Build your invention according to your “plan.”

### **TEST & IMPROVE**

- **Test:** See if it works! Keep a data log of when and how you tested. Evaluate the results.
- You must test your prototype with measurable results ( time, distance, temperature, etc.)
- **Improve:** Gather information from the “test” of your first design to help find problems that need improvement. Improve your first design to make it better!  
**Re-Test:** See if it works better! Add the new data to your data log to show the change. *If your prototype fails to work after 3 documented modifications stop at that point.*





### **CONCLUSION & APPLICATIONS**

Review how well your invention worked and how it might be useful to others.

# Display Board & Set up

**\*\* Please use a standard 3 side board 36 “ x 48 “ \*\***

You may decide where to place these parts on your board. This is an example to give you an idea of what a display board might look like

<p><b>Problem:</b></p>  <p><b>Possible Solutions:</b></p> 	<p style="text-align: center;"><b>INVENTION TITLE</b></p> <p style="text-align: center;"><b>Plan &amp; Create:</b></p> <p style="text-align: center;"><b>Diagram / Blueprint:</b> ( don't forget to label each part of your invention)</p> <table border="1" style="margin-left: auto; margin-right: auto;"><tr><td style="padding: 5px;">Initial blueprint</td><td style="padding: 5px;">Final blueprint</td></tr></table> <p><b>Test &amp; Improve</b> ( place your data log, graphs and photos of invention in testing phase here)</p> <table border="1" style="margin-left: auto; margin-right: auto;"><tr><td style="width: 30px; height: 30px;"></td><td style="width: 30px; height: 30px;"></td><td style="width: 30px; height: 30px;"></td></tr><tr><td style="width: 30px; height: 30px;"></td><td style="width: 30px; height: 30px;"></td><td style="width: 30px; height: 30px;"></td></tr></table>	Initial blueprint	Final blueprint							<p><b>List of materials:</b></p>  <p><b>Conclusion &amp; Applications</b></p> 
Initial blueprint	Final blueprint									

## **Helpful tips on a attractive display**

- Choose no more than 3 colors for your overall theme
- Use large fonts for titles of each section ( problem, possible solutions,etc) each title should be easily seen across a room
- Use colored paper to matte each element of your board including photos, diagrams & graphs
- Try to fill in any large empty spaces with pictures or decorations
- Be **NEAT** with any writing, cutting, gluing , etc...

## Invention Convention Timeline

<u>STEP</u>	<u>DUE DATE</u>
Submit Problem (Survey on website)	February 17,2017
Initial Blueprint or Diagram	February 24,2017
Final Blueprint or Diagram	March 3
Test & Modify	before March 3
Prepare Display	Start by March 13
Presentations	Begin March 20

\*\*\*\*\* cut here \*\*\*\*\*

I have reviewed the project guidelines and due dates with my child.

Student Name: \_\_\_\_\_ Period: \_\_\_\_\_

Parent Signature \_\_\_\_\_ Date: \_\_\_\_\_

Projects that pose any safety hazard will not be approved