

Grade Level: _____

Teacher Name: _____

School Name: _____

Student(s) Name(s):	1:
	2:
	3:
	4:

*If participating on a project as a team, all students should complete **this logbook together**; only 1 logbook is required per project.*

Invention Logbook

The name of the invention: _____

The problem it solves:

Invention Logbook

Statement of Originality

I/we promise that the ideas in this Invention Log are my/our own.

Inventor Signature(s):

Originality

If you plan to compete in Invention Convention, it is very important that your solution is original and does not already exist or is substantially different from any other invention. These are great places to research to find out if your idea already exists:

- Libraries (ask a librarian for advice on where to look)
- The internet (e.g., www.google.com, www.bing.com)
- Stores (e.g., www.amazon.com, www.bestbuy.com, www.walmart.com, www.target.com)
- Books about your topic(s) (look up at www.bn.com or www.amazon.com)
- Trade- or industry-specific publications (each industry has topical magazines and websites)
- United States Patent and Trademark Office (visit www.uspto.gov to search for patents and trademarks)
- Domain registrars (e.g., www.GoDaddy.com to see if your product name dot.com is taken)

Invention Step: Identifying and Understanding

4. Interview at least three people to gain understanding of the problem. Ask them to share their experiences with this problem. How have they tried to fix it themselves? What might help improve this problem for them, specifically?
5. After completing your research, clarify the problem you are trying to solve and restate it.
6. What is the result you are trying to achieve? The more specific you are in describing the result you want, the better your solution will be.

Invention Step: Ideating

1. What are some possible solutions? Brainstorm as many as you can. Don't stop to think whether it is possible (you'll do that later). For now, let your imagination run. Even silly ideas can inspire real solutions.

2. Which one did you choose to pursue? How did you decide which solution to try?

Invention Step: Ideating

3. Has this solution been done before? If it exists, how is your approach different and better? What research did you do to see if this invention had been done before? Who did you talk to? Where did you look? What website did you search? You should show four pieces of evidence of different types of research — talking with experts, searching the internet, interviewing friends and family as to how useful this would be, etc.

Where I looked to see if my idea is new:

A. _____

B. _____

C. _____

D. _____

Document any similar inventions you find. Include how yours is different.

Invention Step: Designing

1. Draw a model (sketch or drawing) of the invention you are thinking about building. Label all of the important parts and features. Explain how the invention will work. If you need more space, use another blank page.

Invention Step: Designing

2. What problems or issues might you encounter with this design? Who did you talk to about this design (another student, parent, teacher, etc.)? What were their comments about your design?
3. How can you fix those problems or address those issues?
4. Revise your design and draw a new model that you think will work.

Invention Step: Designing

5. What parts, materials and tools will you need to make the invention, and how much will they cost?

6. Where will you get those parts and materials?

7. What additional skills or abilities will you need to make the invention?

8. Who can help you build the invention?

Invention Step: Designing

9. Considering the materials and skills you need; do you need to revise your design? Draw a new model.

Invention Step: Building

1. Get the parts and materials and build the invention (ask your helpers, if needed). Don't forget to take notes on this process, too. What is working and what had to change?

Invention Step: Testing

1. Create a testing plan to collect observations and data on your prototype. How will you know if your invention works?
2. Test and evaluate the invention. How did you test the invention?
3. Identify any problems with the invention. What will you change to make it better?
4. Repeat **Invention Step: Designing** to fix any problems. Add additional sheets of paper as needed.
5. Repeat **Invention Step: Testing**. Continue DESIGNING and TESTING until you have reached your goal. Add additional sheets of paper as needed.

Invention Step: Communicating

5. Some creative, attention-getting techniques you can use:
- Alliteration (using the same first letters or sounds): Kit Kat
 - Rhyming: Light Bright
 - Alternative spelling: Sno Bal
 - Using numbers in the name: Super Clean 3000
 - Describing the function of the invention: Hydro-Blast

Based on this analysis, what are some good names for your invention?

6. Which name do you like best and why?