

The Story of Your Invention

Invention Log

What is an invention?

An invention is something new that enables us to solve a problem or do something better or easier.

The purpose of this Invention Log

All stories have an ending. In this case, the ending of what you are doing is your invention. But all stories also have a beginning and middle. The purpose of this Invention Log is to tell the entire story of your invention. In it, during every step you take in making your invention, you will record what you did, why you did it, and how you did it. This Invention Log is an important part of the invention process and is a complete and accurate record of the ideas, plans, and processes by which the invention was created. Invention Logs can be used by students to prove they came up with the idea and invention. Oftentimes, they are used as part of the patenting process.

How to use this Invention Log

The Invention Log is not a book report that is created after you are done. Rather, it is a diary that is continuously filled in as you work on your invention. Follow the steps of the invention process and fill out the various pages as you work on them. When you are done with a page, print your name and the date at the bottom. If you need extra space for any section, make copies of the Blank Page (Page 17) and use that for any purpose. Once you are done, put the pages in the order in which you did them and staple them to make a complete Invention Log. This log will also be used as part of the final presentation and needs to be filled in using complete sentences (except for things like a list of materials). Teams share one Invention Log and should attach signatures of all inventors.

The name of the invention: Liam Spenceh

The problem that it solves:



Statement of Originality

I promise that the ideas in this Invention Log are my own. (If a team, all should complete.)

Inventor Name(s): Liam Spencer

Signature(s): Liam Spencer

Date: 1-12-20

Grade: 2

School: Woodloch Meadows

Town: St. John

Explaining the Problem and Identifying a Solution (Identifying and Understanding)

1. What problem are you trying to solve? The more specific you are in describing the problem, the better your solution will be. How did you come up with the problem?

we drop the cones and

grab one cone and
walk put it down and
walk back.

to much walking!

2. 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.

putting cones down in a line
and picking cones up.

faster than a average
person.

3. What are some possible solutions? Which one did you choose to pursue? How did you decide which solution to try? The more specific you are in describing the solution you will create, the better your invention will be. How did you come up with the solution?

1. basket 1. who organized.

2. walk 2. can't get it out.

3. scoop 3. who organized.

4. my project organization 4. tube with
pusher

4. 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 4 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: See 3.

- A. I talk't to my dad,
 B. I look't in google,
 C. I talk't to my mentors,
 D. I talk't to my class.

Document any similar inventions you found, describing how yours will be different:

	CHEAP PRICE	FAST/EASY TO USE	STORES CONES	PICKS UP CONES	ANY SIZE CONES
LIAM PROJECT	yes	yes	yes	yes	yes
FIRZA TRAINING CONE COLLECTOR	yes	yes	yes	yes	NO
CENTRI SPORT DOME	NO	yes	yes	NO	NO
CONE KING CONE CART	NO!	NO	yes	NO	NO

Teacher Signature - REQUIRED FOR ALL PARTICIPANTS

I approve of the solution/invention my student has chosen to pursue and agree that it not only meets the guidelines shown on the Restrictions and Requirements page, but that it is also safe.

Teacher's Name (Printed)

Shiri Vivek

Teacher's Signature

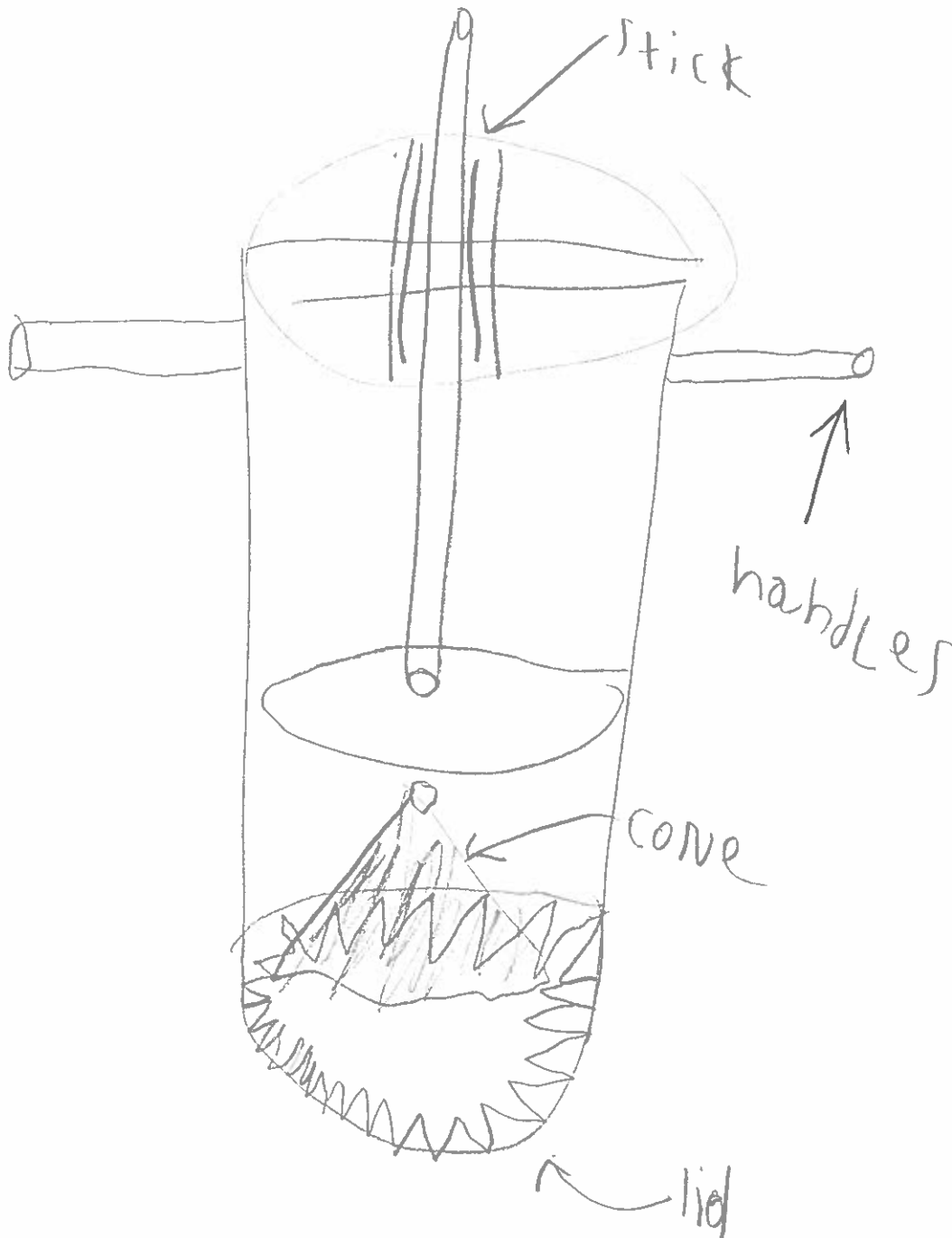
Shiri

Date 12/20/19

I approve of the solution/invention my student has chosen to pursue and agree that it not only meets the guidelines shown on the Restrictions and Requirements page, but that it is also safe.

Creating and Improving the Design (Ideating and Designing)

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



6. What problems or issues might you encounter with this design? Is this design compatible with the principle of sustainability? Who did you talk to about this design (another student, parent, teacher, etc.)? What were their comments about your design?

I had problems finding the right material, I talked to my dad, my mentors and Grampa Tom.

7. How can you fix those problems or address those issues?

I solved the problems by testing the materials.

8. Repeat steps 5 to 7 until you have a design that you think will work. You may have to make multiple copies of a blank page until you have a good design.

Building the Invention or Prototype (Designing, Building, Testing)

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

1. tube
 2. plastic lid
 3. stick
 4. lever or gear
10. Where will you get those parts and materials?

5. rubber band
6. plastic slips

I bought the tube at chelsea
lumber and the stick from mijeh.

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

cutting with scissors, drawing
the design. Giving skills.
problem solving skills,

12. Who can help you build the invention?

my Dad

13. Get the parts and materials and build the invention (with help).

14. Test and evaluate the invention. What did you do to test the invention?

Put a cone in to see if it
stays in and can come out.

15. Identify any problems with the invention. What will you change to make it better?

I first tried paper plates to
hold the cone, but it don't work, so I used plastic

16. Repeat steps 5 to 15 until the invention works as planned. You may have to copy and make multiple copies of this blank page until you have an invention that works the way you want.

Naming the Invention (Communicating)

17. Naming your invention is important.

- What words describe your invention?

cones, tube, cheep and
sports, carry organised
dome handy

- Think in terms of words that will help you name your invention.

- What is the function of your invention?

- Think in terms of marketing it. How will it solve the problem? How will it help others?

- How is your invention different from others that may already be on the market? If it is similar, what did you do to make it better? How is it different?

cheep than others, easy to use,
you can use size cone

- Who is your target audience? Who would use your invention?

kids, coaches, dads and moms.

Some creative attention-getting techniques you can use are:

- 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?

CONO ZONE / cone dispenser

- Which name do you like best and why?

cone zone, cone some hair

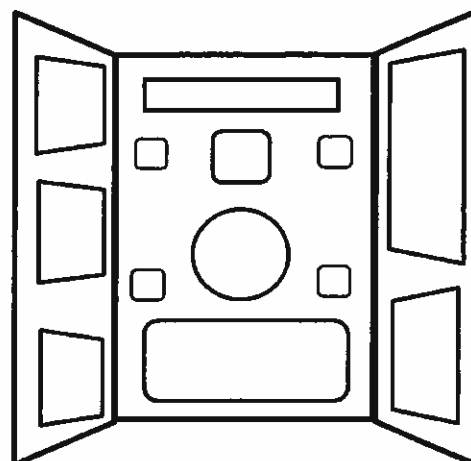
Planning and Creating the Invention Display Board (Communicating)

18. Create your display board. This is an example of what a Display Board might look like, but you can make it look however you want. This is your invention and your display, so use your creativity to tell the story of your invention the way you want.

Be sure you use:

- Fonts that are readable (style, size, color)
- Colors that look good together
- Shapes that are the right size
- Correct grammar and spelling
- Proper punctuation

Maximum size: With the wings folded in, the Display Board can only take 24" of table space. However, you are allowed to open up the wings during your Judging Circle presentation.



Your Display Board **MUST** contain the following information in one consolidated place on the poster:

- Student(s) Name(s)
- Project Name
- Student(s) Grade(s)
- Student(s) School
- School City, State
- Preferred Industry-Focused Award Category (e.g. Telecommunications)
- Patent Status (three options: None, Under Counsel, or Patent Pending)

Students should note "Patent Pending" on their posters for Patent Status **only** if a provisional or non-provisional patent application has been officially filed with the USPTO. If you are currently represented by an attorney or patent agent (pro bono or otherwise), then mark "Under Counsel." It is possible to be both "Under Counsel" and "Patent Pending", or just "Under Counsel", or just "Patent Pending" (if you did the filing yourself).

You might also want to add this information:

- Images showing you building or testing
- How the invention was made
- How the invention is used
- The biography of the inventor
- Text which supports and explains any pictures, drawings, charts, etc.
- What scientific principles were used in your invention? (e.g. buoyancy, heat transfer)
- What engineering disciplines were used in your invention? (e.g. electronics, optics)
- Testimonials from users, research results
- Any other information about the invention that will help explain it, what it does, or why it is good

Practicing What You Will Say About Your Invention (Communicating)

19. Be prepared to answer questions. Here are some questions that you might be asked in the Judging Circle by the judges or fellow students. To help you prepare, you might want to write down some of the important parts of your answers so that you have them when you practice giving your presentation.

- How did you come up with the idea for this invention?

the invention is for my dad. He has a hard time picking up and setting up cones.

- What people, situations, or conditions does this problem affect?

Any one who uses cone can have this problem.

- How did you think up your solution to the problem?

I thought that a tube would be good to hold cones.

- Where did you get the materials for the invention?

We went to the hardware store, Meijer, and Chelsea Lumber.

- Who helped you build the invention and what did they help you do?

My dad helped me build the device.
My grandpa Tom helped me cut the parts.

- Are there other, better materials you could have used that would improve the invention?

Better plastic for the cone thing.

- Who has used your invention and what did they think about it?

My dad has used my invention and he really likes it.



- What changes might you want to make to your invention?

I would make the handles stronger.

I would add a strap to make it easier to carry.

20. Be proud of what you have done. You will use the problem-solving and communication skills you have gained here throughout your life and career. Congratulations on what you've done!

Blank Page(s)

These blank pages are available for you to add anything to your Invention Log that will help explain what you did, how you did it, and what the results were. This could include drawings, calculations, descriptions, test results, etc. Multiple copies of this page can be inserted anywhere you want in the Invention Log.

