

Invention Log

~the story of your invention~

What is an invention?

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

The Purpose of This Invention Log

All stories have an ending and 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 this log, you will record what you did, why you did it and how you did it, during every step in making your invention. This Invention Log is an important part of the invention process and is a complete and accurate record of the ideas, plans, and process by which the invention was created.

How to Use This Invention Log

The Invention Log is not a book report that is created after you are done, but rather a diary, that should be continuously filled in as you work on your invention. Follow the steps in the Invention Process and fill out the various pages as you work on them. When you are completely 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 (at the end of the log) 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 your final presentation. All sections should be filled in using complete sentences and not single words or short phrases, except for the section where you list your materials.

The Name of This Invention:

Kids chop cutting board with

The Problem That It Solves:

When I cut ^{kid-safe} blade cleaner

veggies they get stuck on the knife and I must wipe them off. This is not safe.

Statement of Originality

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

Inventor's Name

[Redacted Name]

Signed:

[Redacted Signature]

Date:

1/23/17

Grade: 2 School:

Salisbury Central

Town:

Salisbury

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Steps in the Invention Process

As you work on your invention, follow these steps and check them off as you complete them.

1. What problem are you trying to solve? *How to assist the*
2. What is your desired result or product? *situation themselves to*
3. What is a possible solution? *I have no idea.*
4. Has this solution been done before?
5. Make a drawing of the invention.
6. What problems might you encounter with this design?
7. How will you fix those problems?
8. Repeat steps 5 to 7 until you have a design that you think will work.
9. What parts and materials will you need to make the invention?
10. ~~Where will you get those parts and materials?~~
11. What additional skills will you need to create and make the invention?
12. Who can help you complete those tasks?
13. Get the parts, materials, and build the invention with help.
14. Test and evaluate the invention.
15. Identify any problems with the invention.
16. Repeat steps 5 to 15, until the invention works as planned.
17. Name the invention.
18. Plan and create the Invention Display Board.
19. Practice what you will say about your invention in the Judging Circle.
20. Be proud of what you have done.

Explaining the Problem and Identifying a Solution

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?

The problem is that when I cut with the knife, the veggies get stuck to the knife. Then I have to wipe them off. If I touch the blade, I could cut my finger.

2. What is the result you are trying to achieve?

How can you measure the result you want? The more specific you are in describing the **result** you want, the better your solution will be.

I will be able to clean the blade safely. Also, the food will fall onto the cutting board and not on the floor.

3. What is a possible solution?

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? How is this better than other solutions for the same problem?

To make a slit to pass the knife through. I thought of it while chopping onions. The other invention involved sweeping a knife on a pad which is not safe and is messy.

4. Has this solution been done before? What research did you do to see if this invention had been done before? Who did you talk to? Where did you look for information? What Internet site did you search?

I looked on google images to find out if someone had thought of my invention.

Creating and Improving the Design

5. Make a 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.



The Kid Safe
Blade Cleaner

works by pulling a knife
through a slit.

6. 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 initial comments about your design?

One problem is some
knives could be too big.

7. How can you fix those problems or address those issues you described in #6?

Since some were too big, I
decided to re-cut the slit with a
bigger saw.

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

Building and Testing the Invention

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

I will need a cutting board and it will cost \$12.
I will also need screws that are recycled.

10. Where will you get those parts and materials?

I ordered it online through amazon.com
The screws were in my dad's work table.

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

I will need to use a saw,
a drill, and a screwdriver.

12. Who can help you build the invention?

My dad will help me build it.

13. Get the parts, materials, and build the invention with help!

14. Test and evaluate the invention. What did you do to test the invention? How did you measure how good the result was?

I pulled the knife through the slit and all the food fell off. It worked!

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

problem (1): Some knives were too big.

problem (2): It didn't work for left-handed kids.

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.

solution (1): I used a wood saw to make the slit bigger.

solution (2): I made another slit at the opposite angle, for left-handed kids.

17. Naming the Invention

What words describe your invention?

Pick some words that will help you name your invention.

kid-safe, sweep, blade, knife, chop, cook, clean, cutting board, slice, slit.

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?

The function is to clean chopped foods off a knife back onto the cutting board so you can keep chopping the food smaller. This helps kids perform cooking prep safely. By using a slit you can clean both sides at once.

Who is your target audience? Who would use your invention? Who will enjoy using your invention the most?

The people who will enjoy my invention the most are kids learning to cook. Their parents can feel comfortable with them using kitchen knives.

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 2000"
- Describing the function of the invention: "Hydro-Blast"

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

blade sweep 3000, kid safe blade cleaner, kids chop cutting board with kid-safe blade cleaner.

Which name do you like best?

[Redacted Name]

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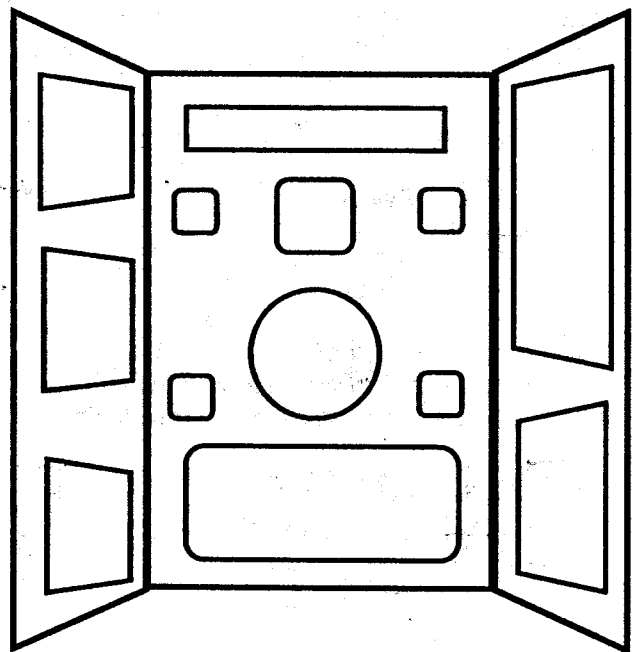
18. Plan and create the Invention Display Board

This is an example of what a Display Board might look like, but you can make it look anyway you want.

This is YOUR invention and YOUR display so use your creativity to tell the story of your invention the way you want.

However, be sure you use:

- **Fonts** that are readable (style, size, color)
- **Colors** that look good together
- **Shapes** that are the right size
- **Correct grammar**
- **Proper punctuation**
- **Check the spelling** of all words



Your Display Board MUST contain the following

The name of your invention
The purpose of the invention or the problem it solves
A description of how the invention works
Your name, grade, school & town

You might also want to add this information:

- How the invention was made
- How the invention is used
- Biography of the inventor
- Pictures/photographs/drawings/charts that support and explain your invention
- What scientific principles were used in your invention? (Examples: buoyancy, heat transfer, etc)
- What engineering disciplines were used in your invention? (Examples: Electronics, optics, etc)
- Testimonials from users
- Any other information about the invention that will help explain its function, what it does, or why it's good.

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

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19. Practice what you will say about your invention

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?

Making omlct Chopping peppers

Dont know how to get them off

Who is affected by the problem you chose to solve?

kids/parents

How did you think of and develop your solution to the problem?

I did some research on available blade cleaners and saw a bowl with a slit, I decided to mount this on a cutting board.

Where did you get the materials for the invention?

I bought a cutting board and used screws from my dad's work table.

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

My dad helped me with the saw and drill.

Are there other materials that you could use that are better? If so, why are they better?

My materials are fine

Who has used your invention? What did they think about it?

My brother/parents used it,

What changes might you want to make to your invention?

left ys, slit size

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!

[Redacted Name]

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