

5th Grade

Invention Convention



Name _____

Guidelines and Invention Packet

Introduction

Welcome to the Invention Convention!

The Invention Convention is exclusively for 5th grade students and gives them the opportunity to use their skills, imagination, and knowledge to create and present their invention at the West Terrace Science Fair.

This packet contains information needed to participate in the Invention Convention.

5th Grade Science Fair Invention Convention Schedule

The following dates are suggestions except for the April 23 submission, which is mandatory.

Weeks of March 31 and April 6

- Review the invention booklet in class and at home.
- Brainstorm possible inventions.
- Explore possible problems in coming up with an invention.
- Make a decision about an invention.
- CHOOSE whether you will complete a display board or a Weebly website.
- **By Tuesday, April 7**--Turn in Page 8 of this booklet with a description of the problem to be solved and solution (invention) idea. Also include a parent signature. (This is for a grade.)
- IF you choose to create a display board and want to buy a board from the school, Include \$4.00 with Page 8.

Week of April 13

- Continue working on your invention.
- Take photos, if needed.
- Begin designing your advertisement.
- Begin setting up your display board or website.

Week of April 20

- Finish your display board or website.
- Put the finishing touches on your invention. See the last page of this packet for the grading rubric.
- Rehearse your oral report (see page 7 of this packet).
- **April 23 (Thursday)** Transport invention, display board, and Invention Journal to school. Present invention to the class for a grade.
- Projects will be on displayed in the classrooms on Friday, April 24 for other students to view.
- Projects will be taken home Friday, April 24.

Invention Convention Guidelines

- Inventions must be the student's own original idea. Adult assistance is acceptable when building the invention, especially with safety and gathering materials, however the actual idea and main effort should be student driven. Please remember, the inventions can include objects, processes, and finding a better way of doing something.
- Safety is a priority. Inventors may NOT include: live animals, matches, open flames, or dangerous chemicals. In addition, electrical outlets are not available. Please keep in mind the safety of the many small children viewing the inventions at the Science Fair.
- The invention display MUST include a prototype or model. The Invention Journal is a necessary step to document the creative process.

Display Board/Website Guidelines

It must include the following data:

1. Title...Give your invention a name.
2. Problem...What problem does your invention solve?
3. Solution...How does your invention solve the problem?
4. Diagram...Create a colored diagram of your invention. Label each part.
5. Advertisement...Create an advertisement. This can be for a magazine/newspaper, radio, or television. It can be designed by hand or using a computer, and may be in the format of a video or audio file.
Think: How would you market your invention? Who would buy it? Any slogan or catchy phrases to encourage people to buy it or want to use it? Why would anyone need it? How is it better than what is already available? What would be a reasonable price?

Developing an Idea

The first step in becoming an inventor is to learn about other inventors and their inventions. Did you ever wonder why the safety pin was invented? Or how toothpaste was packaged before it was put in a tube? Successful inventors always keep an open and curious mind, welcome change, and are looking for a more efficient or easier way of doing things.

Remember, inventors come up with many, many different ideas before they select one to expand on. The more ideas or problems you brainstorm, the more possible inventions.

Need help getting started?

- Observe your environment. Take a look around home, school, your friend's house, or the store. Can you think of ways to improve everyday jobs or tasks?
- Talk with people, interview someone, and always ask questions. Don't be afraid to ask your family, teachers, and community helpers if there's a job, task, or process that has room for improvement.
- What is something in your everyday life that needs a better solution? Is it cleaning up your toys? Is it feeding the dog? Perhaps you can invent a solution to your very own problem!
- Think about the environment. What are some of the big issues facing our environment today? What environmental problems will future generations face? Is there a way you can alleviate those problems?
- Think of problems relating to seasons and weather. Is there something you can invent to improve the removal of snow and ice or removing fallen leaves in autumn?

Developing the Display Board

1. The display board **MUST** be a tri-fold board that can stand up alone. You may get one through the school for \$4 or buy your own at a store.
2. **DON'T** write or draw directly on the board. Instead, write or type the information on printer paper or construction paper and then mount it on the board. Do not use lined notebook or loose leaf paper. Use a straight edge to ensure writing is straight.
3. Mount written information and photos with glue, not tape. Secure the corners so they don't curl up.
4. Add color to the display board for eye appeal!
5. Include photos.
6. Be neat and creative.
7. Create the advertisement and diagram of the invention on construction paper first and then mount it on the Display Board.

Developing the Website

1. Use your Weebly account.
2. Include the Title, Problem, Solution, Diagrams, Pictures, and the Advertisement.
3. Include all information so that someone can look only at your website and understand everything about your invention.
4. You may include links or extra pages for background information or related history about your invention.
5. Be neat and creative.

Invention Oral Presentation

- I. Introduction of Self
- II. Problem
 - A. What
 - B. Why
 - C. How
- III. Solution
 - A. Present title of invention
 - B. How it solves a problem
- IV. Advertisement

Invention Convention

Problem Statement

Solution (Invention)

I approve of my child's choice for the Invention Convention, including the problem statement and solution. *Attach \$4.00 for the cost of the tri-fold display board if you are buying one through the school.*

Parent Signature _____

Date _____

Invention Project

All inventions are **due April 23** to share, present, and set up in classrooms.

Name _____

Requirement	Possible points	Points earned
Title*	10	_____
Problem Description*	20	_____
Solution Description*	20	_____
Advertisement*	40	_____
Invention-actual or model	60	_____
Neatness	5	_____
Grammar/spelling	5	_____
Oral presentation	40	_____
TOTAL POINTS	200	_____

**These requirements must be on the display board or the website.*