

Dear Parents,

The fourth-grade invention unit is here! Students will learn the steps of the invention process and find out just what it takes to be a successful inventor. We will also spend some time learning about famous inventions and inventors. At the end of our unit, your inventor will even present their very own invention to the class!

When thinking about what to invent, I strongly suggest to students that they try to solve a simple problem they have come across. For example, I can be forgetful at times. If I do not write down what someone has asked me to do, I will likely forget to do it. A perfect invention for my problem would be the "Pretty Portable Post-It Notes." (Of course, it's important to have a fabulous name for your invention!) These small pieces of paper could be placed in a decorative case that would hang around my neck. As an extra bonus, I could add an attractive "pen pin" to the product.

Overall, it is important to remember that simplicity is key with this project. I have talked with your inventors as well about keeping their ideas simple and practical.

Along with a model of their invention, your child will create a freestanding display board to showcase his/her work. There are more specific instructions for this display board later in this packet. All of the actual building of the invention and display board will be done at home. Your encouragement and assistance may be needed, but please let this be your child's project.

All models and display boards will be available for viewing during our "Invention Convention" on Thursday, March 7th. This is otherwise known as our Open House. Please help your child transport his/her invention model and display board to school at one of the following times:

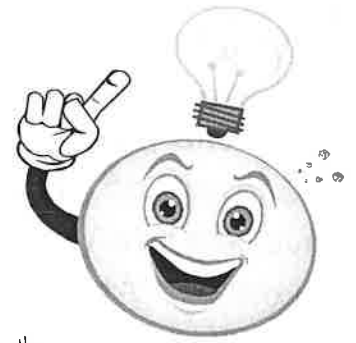
Wednesday, March 6th (after school) or
Thursday, March 7th (before school)

Please do not bring invention materials right before Open House. If you need to make special arrangements, please contact me directly.

Happy Inventing!
The Fourth Grade Team

Be an Inventor- Read as a family 😊

Inventors are problem solvers. They can identify a problem and visualize a reasonable, workable solution. An inventor does not give up until the problem is solved. Thomas Edison conducted over 1,200 unsuccessful experiments before he finally created the modern light bulb.



Successful inventors can be of any age. Chester Greenwood invented earmuffs when he was just fifteen years old! By the time he was nineteen, he had patented his idea and set up a factory to manufacture his product.

Perhaps you, as a student, have the abilities necessary to become a successful inventor. Test your inventive skills. The first step is to identify a problem. Think about the things you do every day. Is there something that would make your life easier or more fun? Ask your friends and family what jobs they do that they wish were easier or more enjoyable. Compile a list of those problems you think you might be able to solve, and then select one problem to work on. It's best to choose a problem that you know something about.

After you have identified a problem, write down every solution idea you can think of. The more ideas you have, the better your chances of solving a problem will be. Usually, the best idea is not the first idea. A person generally does not come up with creative ideas until all the common ones have been used. Try the creative thinking techniques we discussed in class. Perhaps your problem might be solved by discovering an alternate use for a common object.

Finally, here is a word of advice. Keep your ideas simple. You probably are not going to be able to invent a better light bulb, but you may be able to design a better book bag. You will also need to make a model of your solution, and this is a much easier task with a simple solution. Have fun!

Invention Poster

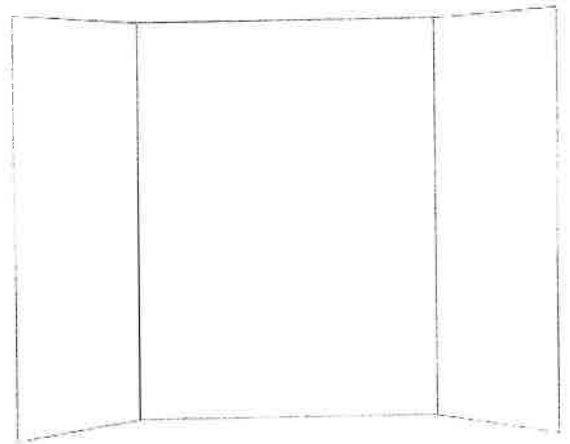
To help showcase your invention, you need to create an invention poster. Your invention poster will sit on top of your desk during Invention Convention. It can be made with a standard sized poster board or a tri-fold display board.

This poster should include the following features:

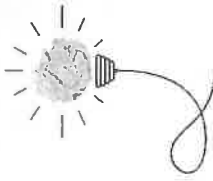
- Name of the invention
- Inventor's name
- Diagram of the invention with labels of each part
- Explanation of the invention's operation- How would someone make your invention work?
- Clearly label your sections!

Your poster may include:

- Drawings, pictures, etc.
- Biography of the inventor
- Jingle, song, or poem about the invention
- Fictional product review of your invention



4th Grade Invention Rubric

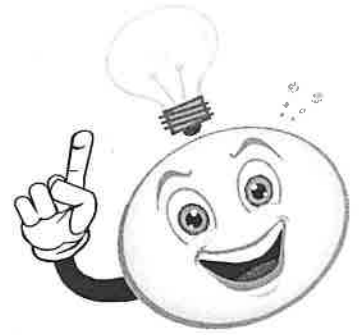
	0 Points Missing	1 Point Below Expectation – Minimal Effort	3 Points Partially Meets Expectations – Some Effort	5 Points Meets Expectations – Demonstrates Effort
Name / Invention Name				
Creative solution to a real-world problem				
Explanation of how your invention works				
Labeled Diagram				
Organized / Neat / Engaging poster				

Teacher Comments:

/25

Invention Planning Sheet

(Steps of Inventing)



Student Name _____

1. Find a solvable problem. (Brainstorm, survey, and select.)

Choose a workable solution idea. (Brainstorm and evaluate.)

2. Design a solution model. (Draw a rough sketch of your model and label the parts.)

3. Start working on your invention poster!

