



Washington School
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Summit, New Jersey 07901
(908) 273-0817

**Summit
Public
Schools**

Lauren Banker, Principal

Dear Parents:

This year, in lieu of our traditional SITE program, Summit will be hosting an Invention Convention on March 3, 2015. This is a voluntary program, which is being offered to all third, fourth and fifth grade students in Summit.

The goals of this program inspire the students to be creative and to develop problem-solving skills in a practical and hands-on manner. The students will be asked to design an original invention or innovation of an existing product based on an area of interest. The invention or innovation should address a specific problem to which a simple, logical solution can be applied. The students who participate in the program will be expected to research the idea, maintain a log, construct a model, and prepare a poster, which explains the process in which they engaged. Then, on March 3, 2015, students will be invited to display their results at Washington School and students and parents can walk around and see the inventions our young minds created. You will receive further details of the event itself at a later date.

So, if your children would like to become inventors, they are invited to use the attached problem-solving model to bring their ideas to life! Please complete the attached registration and return it to your child's teacher by January 12, 2015. Please note that there will not be any "judging" this year and therefore, there will not be any formal "winners". However, we expect that all children will leave the convention feeling success!

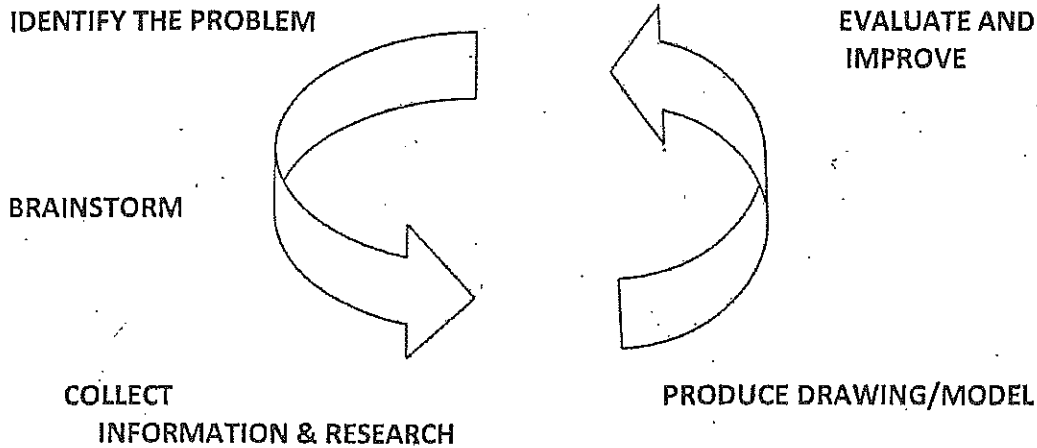
You may call 273-0817 if you have any questions.

Sincerely,

Lauren Banker
Invention Convention Coordinator

Intermediate Problem-Solving Model

The 5-step problem-solving or intermediate model:



1. **Identify the problem:** Find an area where a problem arises, and specifically identify the problem.
2. **Brainstorm:** Think up different solutions to the problem.
3. **Collect Information:** Research by talking to people, looking in shops, using library resources, internet or writing for help.
4. **Produce Drawing or Model:** Make an illustrative drawing and/or (working or non-working) model.
5. **Evaluate and Improve:** Ask questions - can I make it better? Do any parts need changing?

(After completing these 5 steps, decide if you are satisfied with your solution to the problem and ready to present. If you have an unsolved problem, go around the loop again.)

The Problem-Solving Process

Introduction

The problem solving process (use of the problem-solving loop) is critical to a successful SITE program. In this process there is a series of sequential, but not rigid, steps through which the student moves. The outcome is not only a project and a deeper understanding of the process of inventing, but also an experience in independent thinking and an opportunity to incorporate individual interests with generalized skills. Following the SITE program guidelines, a teacher encourages students through the steps of the invention process. Working independently and cooperatively and utilizing a problem solving approach, students:

- Identify a problem or need.
- Collect information and research ideas.
- Brainstorm solutions to the problem.
- Produce a drawing or model of solution to the problem.
- Test, evaluate and improve final idea.
- Present the invention.

Models

Three problem-solving models are included for your use.

- ❖ Primary Model (4 steps)
- ❖ Intermediate Model (5 steps)
- ❖ Secondary Model (9 steps)



Invention Convention Student Registration Form

Entrant _____ Age _____

School _____ Grade _____

Teacher's Name _____

Home Address _____

Home Phone # _____

Individual or Partner (circle one)

If working with a partner, list partner's name _____

Name of Invention or Innovation _____

I hereby enter Summit Invention Convention with the understanding that I will be responsible for developing and submitting my invention.

Student Signature

Parent Signature

Return this form to your classroom teacher no later than **January 12, 2015.**