Fidelity® Investments 2006 Young Inventors' Program®
Saturday, April 8, 2006
8 am – 2 pm
Winnisquam High School, Tilton, NH

Fidelity Investments and the Academy of Applied Science celebrate the New Hampshire Young Inventors' Program® 20th Anniversary on April 8, 2006

Dear Friends,
I am happy to announce that Fidelity Investments Merrimack Region is sponsoring the Fidelity® Investments 2006 Young Inventors' Program®. We look forward to celebrating the Young Inventors' Program® 20th anniversary with you and our sponsor, Fidelity Investments.

Pamela Hampton
Program Director
Young Inventors' Program®

Guidelines and student and school entry forms are attached. Updated program information will be mailed to parents and teachers in March (with directions). Included in this mailing:

- School Entry Form – submitted by Teacher/Student Advisor – **Due March 17, 2006**
- Student Invention Entry Form – Student will bring this to the **April 8, 2006** Annual Celebration
- Student Rube Goldberg® Machine Entry Form – Student will bring this to the **April 8, 2006** Annual Celebration

Registration Deadline is Friday, March 17, 2006!

(Late entries will not be included in the Program.)

The preliminary program is indicated below.

8:00 – 9:00	Registration & Invention Set-Up/Judges' Orientation/Refreshments
9:00 – 11:15	General Viewing & Judging of Inventions
10:00 – Noon	Entertainment
11:00 – Noon	Lunch (Cafeteria)
Noon	Awards Ceremony

Please share this information (and guidelines) with your students' parents.
Please note the new location this year - Winnisquam High School in Tilton, NH

Pamela Hampton
Academy of Applied Science
24 Warren Street
Concord, NH 03301
(603) 228-4530/fax: (603) 228-4730
phampton@aas-world.org

Guidelines

General Information

Please refer to your Meant to Invent! Teacher Handbook for more details! Or visit our website; www.aas-world.org

Inventions - One grade level entry per 75 student participants. An additional entry is permitted if student participants from a particular grade level exceed 75.

Students can compete in Special Award categories (see section on Judging), can compete in more than one special category, and all inventions are eligible for grade level awards.

Rube Goldberg® Machines - Rube inventions are limited to three (3) students per team. One grade level Rube invention entry per 75 participants with an additional entry allowed if student participants from a particular grade level exceed 75.

Suggested Timeline

1. Schedule for classroom or school invention program.

   Week One:
   Identify problems that might be solved with an invention.
   Pick a problem to work on.
   Look for similar inventions
   Week Two:
   Plan how to solve the problem.
   Begin working on a model.
   Week Three:
   Test the model and improve as needed.
   Week Four:
   Complete the model and prepare a presentation.
   Week Five:
   Present invention to class and/or school.

   Select inventions to represent each grade (K-8) in your school at the **April 8, 2006** Annual Celebration. (based on the above - 1 grade level entry per 75 student participants, etc).

   School entries must be mailed, faxed or e-mailed to the Academy of Applied Science by **March 17, 2006.**

   Pamela Hampton
   Academy of Applied Science
   24 Warren Street
   Concord, NH 03301
   phampton@aas-world.org
   Fax: 603/228-4730/Phone: 603/228-4530

2. Each student inventor should complete the *student entry form* and bring to the **April 8, 2006** annual celebration with his/her invention.

Student Information

Please share this information with the students (and parents) who will be attending the Annual Celebration.

1. Students should complete the *Student Entry Form* and bring it with them to the Annual Celebration.

2. Students should conduct research using the Internet, stores, catalogs, or conduct interviews to ensure their inventions are unique.

3. Students should be prepared to make an oral presentation of their invention and answer any questions the judges may have.

4. Students should bring an extension cord and table for Rube Goldberg® Machines, if necessary.

5. Inventors' Choice – This is a fun part of the day! Each student inventor is encouraged to view other inventions and vote on the invention they like best. They will be given ballots at the time of registration to vote for their favorite invention and favorite Rube Goldberg® Machine (1 invention and 1 Rube Goldberg®). Votes should be placed in the ballot boxes by **11:15 a.m**. Voting should take place after (or before) their own inventions are judged.

Judging

How it works

The judging process is an important component of the celebration. Three judges are assigned to each grade level to evaluate each invention and to ask pertinent questions of the inventor. During this time other inventors in the room are invited to listen to each presentation. Parents and friends are asked to leave the room while judging is underway.

Inventions are judged on the following criteria:

- Originality
- Written description/presentation
- Model/illustration
- Research performed
- Usefulness

After they view all the inventions, the judges return to the judges' room to make their decisions.

General Categories

Judges select one invention from each grade level for the following awards:

- Best in Grade
- Environmental
- Special Needs
- Fun and Leisure Time
- Practical and Useful
- Original and Unique
- Most Marketable
- Judges' Choice

Inventors' Choice Award - Student inventors are asked to view all the other inventions (but must remain with their invention during the judging period). With ballots they receive at registration, they may vote for their favorite invention and Rube Goldberg®

Rube Goldberg® Machines

Rube Goldberg® Machines are different from the inventions people are used to seeing. A Rube Goldberg® Machine makes a simple task complex. The materials used are the most important component of the machine. Students should be encouraged to use items around the house, i.e., raid an old toy chest, use broken appliances that need repair, etc. The machine must use a certain number of individual steps to complete an assigned task. The working construction of a Rube Goldberg® Machine must be considered safe to operate and must not cause damage. It must use 4 simple machines at least once: wheel & axle, inclined plane, lever and pulley or screw. A minimum of 6 steps is required to complete the task.

Rube Goldberg® Machines are divided into two groups:
- Individual projects
- Team projects (limited to 3 students per team)

Judging criteria includes evidence of the following:
- At least 4 simple machines
- Construction
- Written/oral presentation
- Creativity

Entries in each group will be considered for:
- Original and Unique
- Best Team Effort
- Best Individual Effort
- Most Complex
- Judges' Choice

Special Award Categories

Student inventions are not limited to the general category and may be judged in the following special award categories as well. Please encourage your students to consider these areas when brainstorming a problem to solve.

Fidelity Investments Innovation and Technology Award – Sponsored by Fidelity Investments. This award is presented to the student whose invention reflects Fidelity's commitment to flexibility, innovation, and creative uses of technology. The award will recognize an invention that leverages technology to produce service enhancements, human efficiencies and cost savings.

1 - Award valued at $100

Electric Award – Sponsored by the Institute of Electrical and Electronics Engineers. These awards are given to the inventions that involve the use of electric phenomenon and technology.

1 - Award valued at $100
1 - Award valued at $75
1 - Award valued at $50

Medical Award – Sponsored by the N.H. Medical Society. These awards are given to the inventions that solve a health-related problem.

3 - Awards valued at $50 each

Steve Caney Award – Sponsored by Inventor, Steve Caney. This award is chosen by Steve Caney and is given to the invention of his choice.

1 - $100 Home Depot Gift Card

Inventors' Digest Award - Sponsored by Inventors' Digest Magazine. These awards are given to the students whose inventions solve problems that other people face.

1 - Award valued at $50
2 - Awards valued at $25 each

Joyce Kenne Scholarship Award – Sponsored by Camp Invention. This award is given to the student whose invention displays creativity, originality and "out of the box" thinking.

1-week scholarship - New Hampshire Camp Invention
A week-long summer enrichment day camp offered at local elementary schools in New Hampshire.
(Grades 2 – 6)

NOTE: If a team created the winning invention, each team member will receive the same award (as indicated above).
All awards are subject to change.

2006 Fidelity INVESTMENTS Young Inventors' PROGRAM

School Entry Form

ENTRY REQUIREMENTS: Entries are due **March 17, 2006**. One grade level per 75 participants, with an additional entry allowed if student participants from a particular grade level exceed 75. Rube Goldberg® Machines may be entered separately. Students must bring inventions and completed entry forms with them on the day of the event – **April 8, 2006.**

School

Mailing Address City Zip

Contact Person Daytime Telephone

E-mail

Total # of students participating at your school Would you like to be a volunteer?

Please list each student's grade, name, mailing address and invention below. The student's parents/guardians will receive information about the event in March. CATEGORY SELECTION IS NOT RQUIRED. However, if a student would like to be judged in the **Medical, Electrical or Rube Goldberg® Machine** categories, please indicate **M, E or R** in the Category Box**.** The names supplied will be used to prepare the program, nametags and award certificates. If errors are made on the award certificates they will be corrected the week after the Annual Celebration.

Mail, Fax or E-Mail Form to:
Pamela Hampton Academy of Applied Science 24 Warren Street Concord, NH 03301
Fax: (603) 228-4730/E-Mail: phampton@aas-world.org

(Attach extra sheets if necessary to list all entries.)

Grade	Student Name and Home Address	Invention	Category Award M/E/R

2006 Fidelity INVESTMENTS Young Inventors' PROGRAM

Student Entry Form

Do Not Mail - Bring this form with your invention on April 8, 2006!

Name _____Grade _____

School_____Teacher _____

1. Name of invention _____

2. Where did you get the idea for your invention? _____

_____

_____

3. Explain how your invention works. _____

_____

_____

_____

4. Who will benefit from your invention? _____

_____

_____

_____

5. Why do you think your invention is new and original? _____

_____

_____

_____

(over)

MODEL OF INVENTION:

Your model does not need to actually work, but it has to represent your invention idea. Use everyday materials from around your home or school. Please mark your model clearly with YOUR NAME and the INVENTION NAME.

DRAWING OF INVENTION:
Be sure to draw and label all parts in the space below. You may use pencils, pens, crayons or magic markers.

2006 Fidelity INVESTMENTS Young Inventors' PROGRAM®

Student Rube Goldberg® Machine Student Entry Form

Do Not Mail - Bring this form with your invention on April 8, 2006!

A Rube Goldberg® Machine is a device using the most extraordinary means to accomplish an ordinary task with simple machines. The working construction of a Rube Goldberg® Machine must be considered safe to operate and must not cause damage. It must use 4 simple machines at least once: wheel & axle, inclined plane, lever and pulley or screw. A minimum of 6 steps is required to complete the task. The demonstration of the device can be creative or dramatic, and the student may trigger the beginning action.

Student Name:	**Grade:**
School:	**Teacher:**
Name of invention/device:	
What ordinary task does your device accomplish?	
Describe how your device works by listing the steps (at least six), and what happens at each step:	
1.	
2.	
3.	
4.	
5.	
6.	
List the simple machines used and the number of times they are used (at least four):	

(over)

Drawing of Rube Goldberg® Machine:

Draw and label each step – this should match “list of steps” on the front of this sheet.