

## Sample Student Abstracts

Below are samples of actual project summaries/abstracts from the 2004 Elementary Science, Engineering, and Technology Fair. The summary/abstract is used to determine whether or not the project qualifies for competition in the 2005 Elementary Science, Technology, Engineering, and Technology Fair based on the fair Rules and Regulations as they are described on pages 9 and 10. The project summary/abstract is also used to determine the content area of the project for purposes of awards.

The following sample project summaries/abstracts are reproduced without correction exactly as they were sent for registration.

Name: Christopher

Grade: Fourth

Name of Project: Food Batteries

*In my project I'm trying to see which food would make the best battery. My hypothesis is that the more acidic the fruit or vegetable the better the battery because the acid reacts with the metal wire or nail to create more energy. In my investigation I will test and record the pH value of an apple, banana, carrot, lemon, orange, and potato by squeezing juice onto pH paper. Then I will insert a galvanized (sic.) nail, and a copper wire into each fruit or vegetable. I will make sure that the copper wire and nail are always 1 (sic.) inch apart. I will hook the nail and wire to the alligator clips and connect the other end of the alligator clips to the multi-meter. Then, I will turn on the multi-meter, measure and record the electric voltage produced by each fruit or vegetable. This should let me know if acid affects the amount of electricity produced by each fruit or vegetable.*

Name: Caelan

Grade: Fourth

Name of Project: Different Waters

*I wanted to find out how different waters effect (sic.) the way plants grow. My experiment was started with seeds from the same seed packet, same kind and amount of soil, and the same size pot. They were then placed in a window with southern exposure. I did this because I wanted them to grow at the same time and control as many variables as possible. After three weeks of growth I labled (sic.) and began watering with 3 (sic.) kinds of water. I (sic.) tap, dishwater (Grey) and bay water (Brackish). Over the next 3 (sic.) weeks, I watered twice a week with 2 oz. of each kind of water. I also oserved (sic.) them.*

Name: Kate

Grade: Fifth

Name of Project: Percolation

*Do different types of soils have different percolation rates? Percolation is that act of rain, in nature, seeping through the ground after rainfall. To recreate this I used a coffee maker. The materials used were: 3 cups of dirt, sand, and potting soil, a coffee maker, coffee filters, tap water, and a stopwatch. In the coffee maker I put 8 cups of cold tap water. I took out one of the cups of soil that I already put out and put it in the filter. Next I put that filter in the coffee maker. After that I hit start on the stopwatch and the coffee maker. When the main stream of water flows out then I hit stop on the stopwatch. I then record the time it took for the water to flow through. Thin (sic) I had to repeat the same steps 3 times for every type of soil.*

Name: Hannah

Grade: Fifth

Name of Project: M & M Meltdown

*This project will investigate whether the color of an M&M has an effect on its melting rate. To determine this effect, first place a regular M&M on a paper plate. Then place the 100 watt bulb 12cm away from the M&M. Time in minutes and seconds how long the M&M takes to melt. Repeat the above steps three times for each M&M color. Finally, record results in a chart.*

