Math and Science Camp

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Day 5

Summer 2008

Inside this issue:

CSI: Environment . . . CASE CLOSED

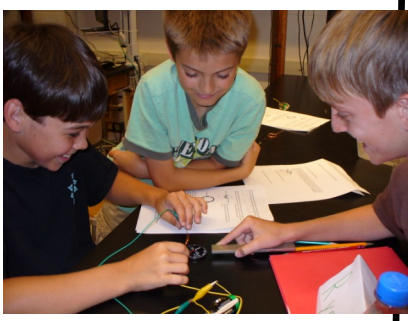
Campers have examined suspects from all over the communities by the bay area. Their search has lead them to test for many environmental symptoms of pollution. Other environmental impacts have been studied, like the population cycle of animals in the area. Today, it all came together for campers.

Each suspect has been checked out, even down to their alibi. The evidence was mounting. In the end, it turns out every one contributed to the problem. A little pollution here and a little there made a large enough impact that the fish were dying. Great detective work campers!

Campers on top of all the other cool stuff you get to learn and take home, don't forget your math and science camp t-shirts. So now you have an airzooka, water bottle rocket, pattern t-shirt, and a camp t-shirt. AND Just because it's the last day, this newsletter is two pages long. ☺

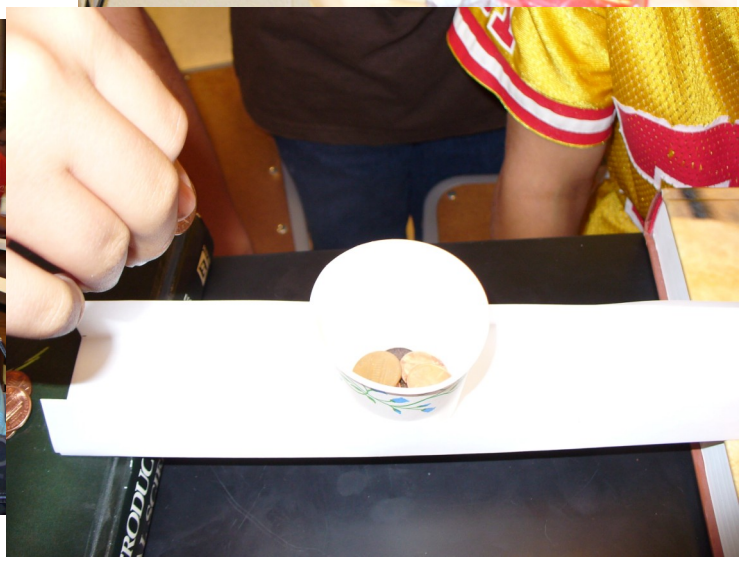
Motors

So how can we use magnets, a battery and some wire to make a motor. That's just what campers found out this afternoon. Campers first investigated what is going on around a magnet by examining what happened to the arrow on a compass when brought near. From there, they learned about force fields and that magnets, as they already suspected, exerted a force through space. Then it was off to work on their motors. A coil of wire, a rubber band, two short wires and a battery and they were set. As the wire needs to be straight in order for the prime spinning force, the campers worked hard to get their motors just so. The best part . . . they get to take them home!



Paper Bridges and Math?

How many pennies can a paper bridge hold if a paper bridge could hold pennies? As many pennies as each math and science camper counted. Graphing is a visual way to see how one variable is changed by another. Campers investigated today how many pennies would collapse a paper bridge. They changed the number of papers that made up the bridge and then plotted the data to see what kind of curve they got. Just how many pennies can a paper bridge hold . . . Just ask your camper!



Stock Market

Up or down, each stock was graphed for the course of the week. Yum Brand (owners of KFC and Taco Bell) was up and then down. Sketchers (textile company) on the other hand has been going up all week. How did your camper's stocks do?

Check out their portfolios today!

Chemical Formulas: How do they get them?

Ever get puzzled by how chemists know how much each of those really, really tiny atoms weigh? Campers found out just how they do with a modeling exercise designed to shed light on just that. Campers were given several containers each with a different number of N's and B's. Using the weight of each container they were able to calculate the weight of one N and one

Robots

Campers had a great time learning how to build and program their robots this week. Several made it through three of the harder courses that had been laid out. Each group went over and above expectations by adding attachments: arms to move, sensors to pick up sound, sensors to "see" white/black boundaries, and bump sensors. The excitement and success of working with robots was a great part of each day. Campers here before 9:15a each morning, gravitated the robots. With this consistency came many developments on their robot

Campers, it's been a blast. Thank you for a wonderful and exciting week of math and science! We hope you come again. Enjoy the rest of your summer! **Staff of 2008 Math and Science Camp**