

Is it Science or Magic?

The Stars Challenge at Monmouth University 2008



The Stars Challenge Is it Science or Magic? at Monmouth University Winter 2008

Is It Science or Magic? The Stars Challenge

Dear Students,

Congratulations! You have successfully completed "Is it Science or Magic?" You learned about chemistry and the scientific process—atoms and molecules, bonds and polarity, density, polymers, solutions, acids and bases, and gases. There's a great deal more to learn, but you are definitely off to a great start.

You all demonstrated the skills needed to do well in science. You are proficient in the study of chemistry as well as in the formulation of questions, the writing of procedures, conducting experiments, and communicating results. You learned to do this safely, while having fun. You were creative and imaginative.

I appreciate your enthusiasm as Abe and I tried to show you the "magic" of chemistry! Always remember that "Chem-is-try"! What kind of chemist will you be? Food or fragrance chemist? Cosmos chemist? Polymer chemist? Physical chemist? Analytical chemist? Biochemist? Chemistry teacher? So many choices!

Sincerely, Ms. Lyons





It may seem like magic, but the chemical concepts of density and polarity are at work here along with the students.



Penny Mass and Volume 80_ 70 60 -Mass mass Volume (9)41 a Net Volume (mL) Slope= 14 54

We graphed our data to analyze and calculate density. Then we turned to a study of polymers to make silly putty, oobleck, and glue!







We created a 3-D model of a gel polymer using pipe cleaners. Our chemical studies continued to reflect art in science.



Abe "tricked" us with School Spear-it! That demo involved polarity and polymers. Students were challenged to produce the best glue.



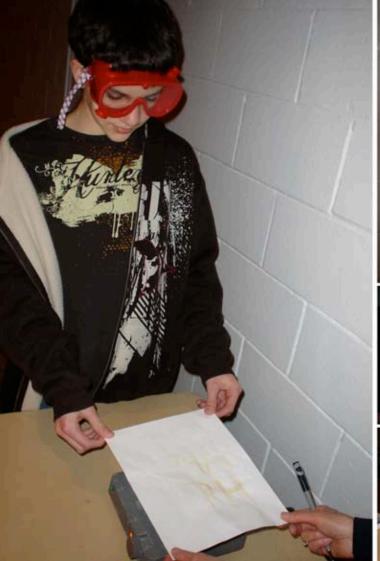


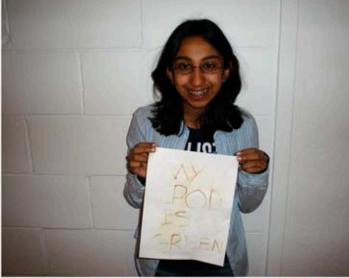
Acids and bases provided lots of opportunities to test everyday items, such as grapes and oranges, as well as cleaning solutions and kitchen liquids.





The reactions of acids and bases provided the chemistry of invisible inks. We used our knowledge to "paint" paper towel animals.







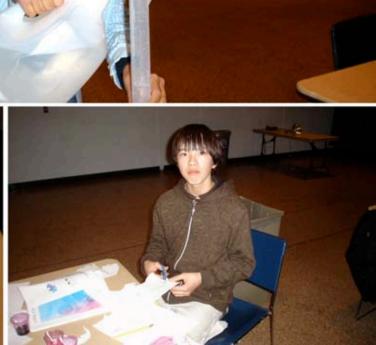












Dr.



Students were challenged to create a colorful reaction with cabbage juice indicator, Alka-Seltzer, lemon juice and baking soda.



Bobby Knollwood School



Lauren Howell Memorial School



Connor and Chelsea Maple Place School



John St. James School



Rianna Shore Christian Academy



Alex Shrewsbury School



Chase Forrestdale School





Colette, Chris, Danny, and Sara Cedar Drive Middle School





Muhammed

Red Bank Middle School



Ryan Markham Place School

Sara

Red Bank Charter School







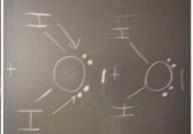
















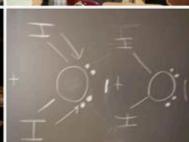














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