



# Is it Science or Magic?

The Stars Challenge at Monmouth University 2010



Dear Students,

I can't believe we have finished our Chemistry adventure already! We spent our Monday evenings together on an incredible journey. Where has our adventure taken us? Together we examined the chemistry of atoms and molecules, density, bonding, polymers (lots of those), solutions, gases, bubbles, and electrical conductivity. We have worked hard but for the most part, we had FUN. As a cohort of learners we left each week chatting about our experiences.

We all remained enthusiastic while we safely—observed, examined, questioned, defined, modified and discovered. You are great collaborators and through this experience together we used creative approaches to explain scientific laws and theories. Avneesh and I had a wonderful time sharing our magic with you. Thanks to cell phone cameras you were able to wow your family and friends with some of you new chemistry “magic”.

What does the future have in store for you? I imagine great accomplishments—doctors, researchers, pharmacists, professors, teachers - the list is endless. Your enthusiasm for learning is contagious. The world is secure with you as its future. It has been a great journey with you and I cannot wait to hear about your science accomplishments in the future.

Chemically yours,  
Mrs. McCarthy (aka Mrs. McChem)





**Scientists or Magicians?**



Colors everywhere! Kaleidoscopes and chromatography.





Steady hands, good measurement equals a rainbow column.

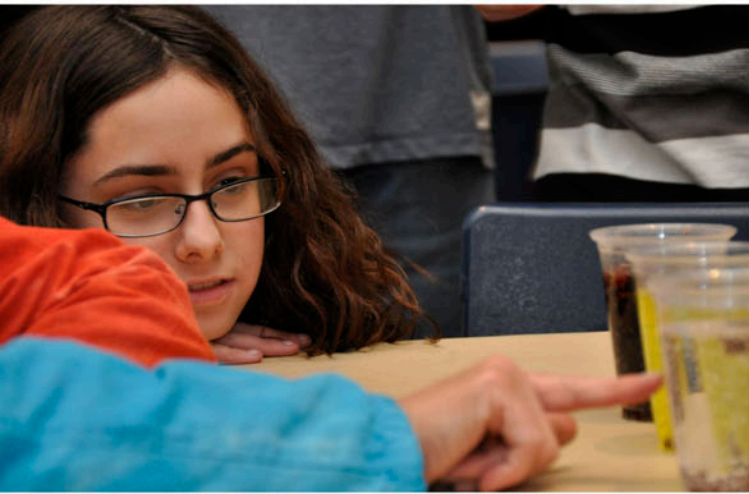


Alka-Seltzer, vegetable oil, water, and food coloring make a great lava lamp... what a gas!





Squidy dives when the pressure is “on”, floats when we release the pressure.

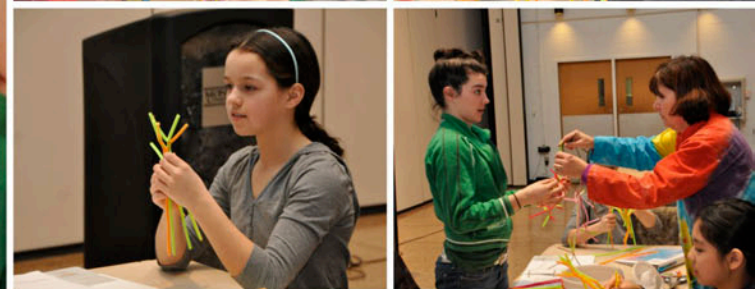


Hey Mrs. McChem, are those really lice? Are they really alive? It looks like they're breathing and swimming.





Is it a solid? Is it a liquid? It has properties of both. Gak and oobleck seem to violate the laws!



Jello structures... it made us giggle.





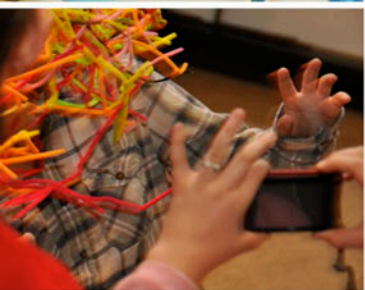
Pouring, mixing, measuring, observing... we all saw different things.







Vacuum packed... who'd think we could stay "wrapped up"... even for a little while.



Cell Phone Moments. Yes, we really did that!



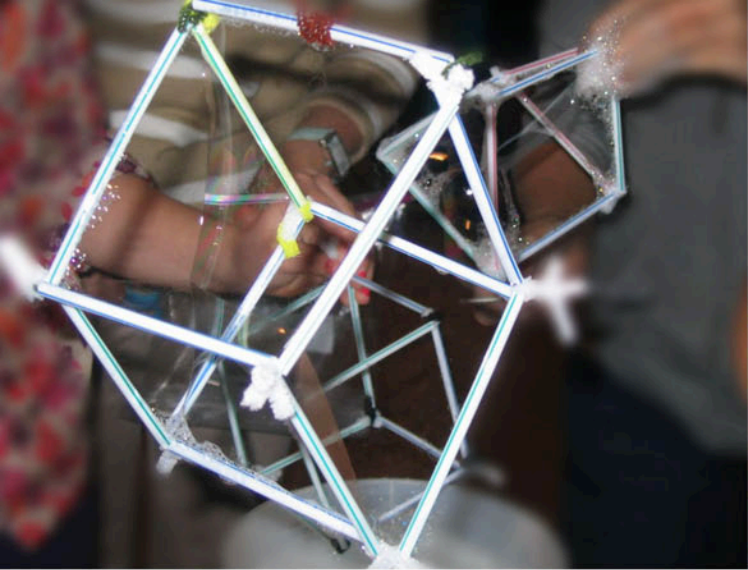


Aqueous solutions change the properties of water. Salts dissolved in water make it conduct electricity, Our clock ticks. Our pickle lights up. Alcohol in water increases vapor pressure. Our birds get thirsty.



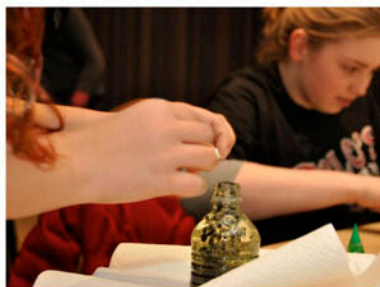
Hydrogen bonding in water made the spoon stick to our nose. Oh my, we all had elephant trunks!!!!













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Made on a Mac