



Explore, Imagine, and Build

The Stars Challenge at Monmouth University 2008



The "Stars" of the class *Explore, Imagine, and Build*

As always, I am amazed of how much I have learned from your insights and questions. Your classroom participation has helped all of us understand the “why” to many physics questions. By understanding “the why” — the laws of nature — everyday observations become understandable as well as enjoyable. By exploring the mysteries surrounding so many natural occurrences, it is my hope that you have become connected to your world, interacting with it rather than feeling yourself mystified by it.

We discovered these laws of nature by building devices that demonstrated the physical rules that explain how the device works. We sat on a bed of nails — NO PAIN! We sailed with Bernoulli into the wind — in life may the wind be always at your back. We hovered across the room using a hovercraft — may physics always give you a lift in life. We made a “tornado” in a bottle — DON’T LET IT OUT! We were “crushed” by air pressure in a plastic bag — no pain no gain of physics insight. We constructed “weight cans” to discover how much we would weigh on the planet Jupiter — wow! Time to go on a diet. We swung a cup of water over our heads with out getting wet — physics is so much phun!

Look at all we have accomplished by just knowing a few laws of nature. Continue your study of science! The laws of nature and a whole world of understanding await you!

Most Sincerely,
Mr. Valente



Trying as hard as he can, Jackson can't blow the card across the table. Bernoulli's principle in action!



Chris and Ryan get a mouth full of water courtesy of Bernoulli's principle.



Sara makes a bridge for her team's "sail boat".



Ken really enjoys being "crushed" by air pressure.



Matt and Neyha get set to make a flash with physics. Katherine wins the dollar by keeping the bottles from falling.



Morgan is ready to demonstrate her inertia block. Denis and Ryan do important calculations while constructing their inertia block.



Danny carefully fills his planetary weight cans - how much does it weigh on Jupiter? Jackson keeps the inertia ball within the lines!



Ken can't wait to spin for physics.



The whole class hovers for physics.



Lauren can't believe her eyes that Chris made a tornado in a bottle!



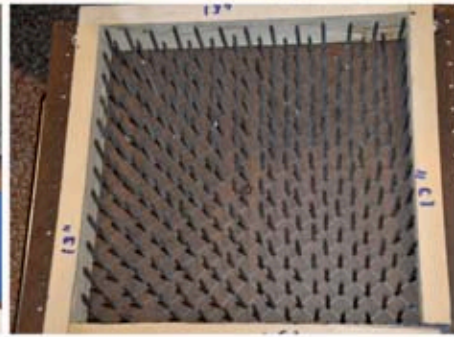
Mr. "V", Ken, Dan, and Morgan demonstrate centripetal force.



Rianna tries to break an egg against a sheet. Is that egg hard-boiled?



Denis, Ken, and Danny are amazed that they can't hold a 2.2 pound weight at the end of a stick.



Lauren, Sara, and Katherine are surprised that the nails balance. Is that a bed of nails?



Yes, it is a bed of nails! And all the students, especially Ryan, are surprised that it doesn't hurt to sit on it. Though Sara isn't at all that sure.





The Stars Challenge



Made on a Mac