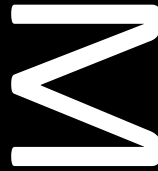


LUSD 2015

STEAM

Science
Technology
Engineering
Arts
Mathematics



Festival

Districtwide STEAM Community Outreach

Friday, May 29, 2015

Lompoc High School Cafeteria & Surrounding Area

6 to 8 PM

Design & Engineer



Catapult Prototypes



Testing Foot Stomp Catapult

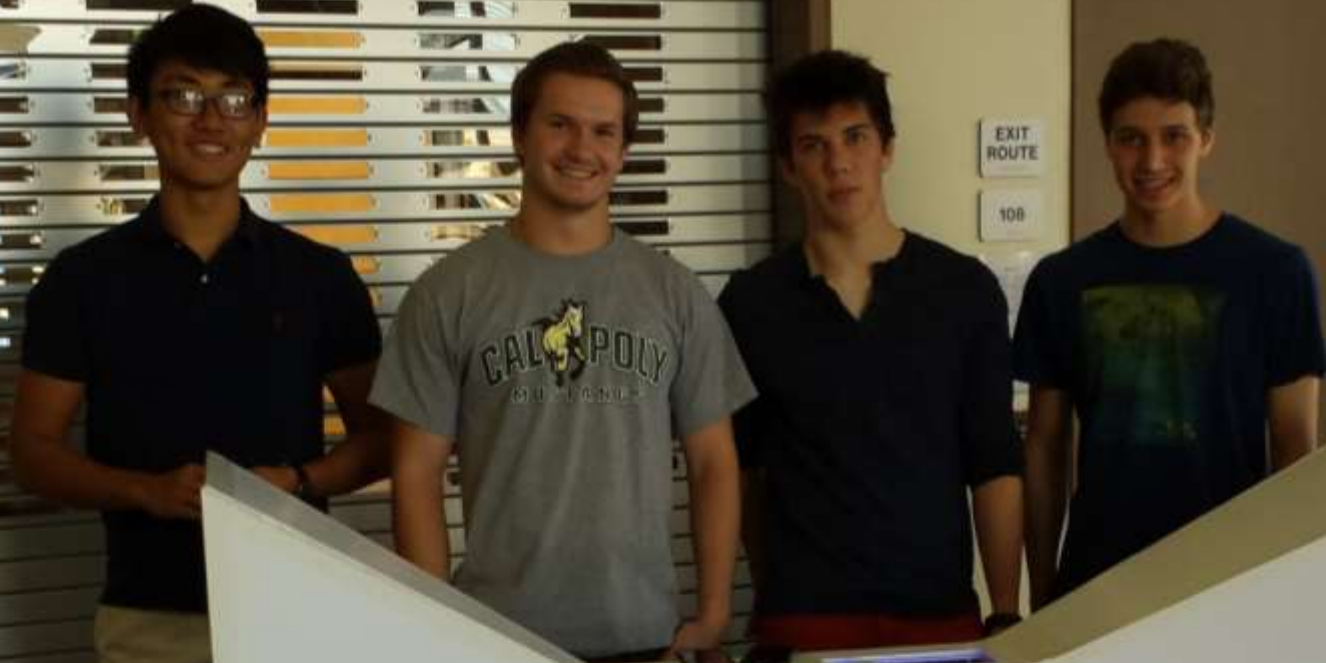


Sliding Friction Demo



Wind tunnel test of student clay models

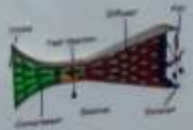




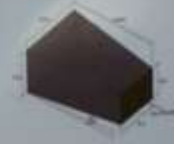
Wind Tunnel
 By: Greg Ritter, Jared Garcia, Michael Wu, and Nick Laurito



Setup room!
 The wind tunnel is set up in the space for air flow through which gravity is not a factor. It also contains a device that helps control the air flow.



Wind Tunnel
 The first attempt to study aerodynamics were done in 1800 years ago with sailing vessels that is sailing for trade. It later used the first 1800s that the first wind tunnel was designed and by the early 1800s the first complete design had become widely used. Today the largest wind tunnel is in Italy, Italy with a test section of 60 by 120 and three jet engines with a test section of 60 by 120 and three jet engines with a test section of 60 by 120.



Diffuser
 The diffuser gradually narrows which allows the air to be directed and spread out. This helps reduce the noise level for the wind tunnel and helps decrease the cost.



Test Section
 The test section is where the air is directed and spread out.



Fan
 The fan pulls the air through the test section. It is located at the end of the test section so the air flows smoothly and is not stopped by the fan blades.

Helicopter build station





Recovery system
design test

Egg Drop



Whirly bird construction



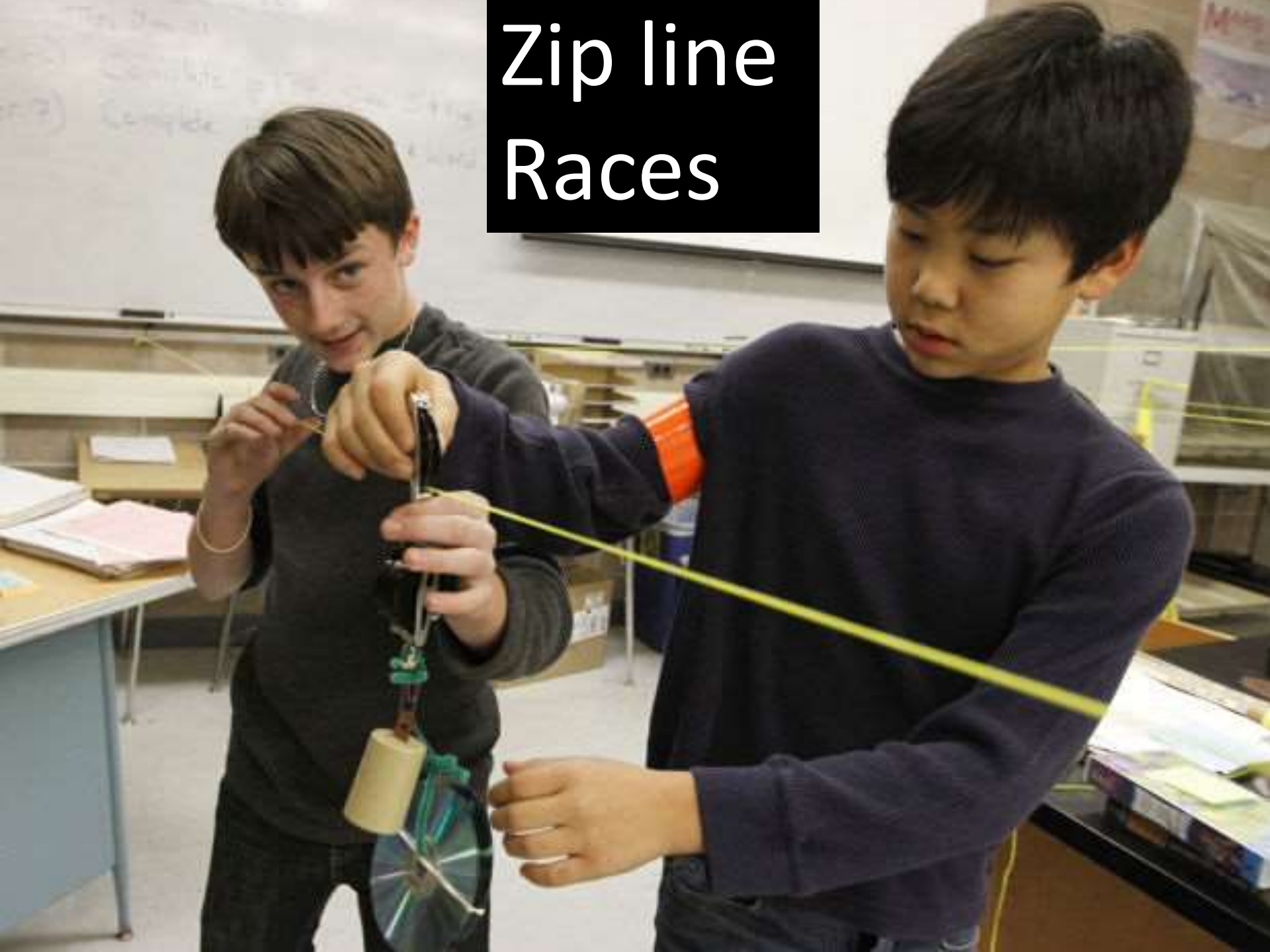


Trebuchet
Wall Buster



**Hot Air
Balloon**

Zip line Races





Rubber
band
powered
cars

Kelp Holdfast Investigation







<https://www.flickr.com/photos/usasef/with/14628274421/>

Who are we seeking to Participate?

- Teachers
- Clubs
- Student groups (of approximately 2 to 6, and sometimes more).
- Local businesses (e.g. Santa Barbara Skydive, Surf Connection, Hobby Shops, etc.).
- Companies (e.g. United Launch Alliance, Raytheon, SpaceX, etc.)
- Colleges and Universities (e.g. UCSB, Cal Poly, AHC)
- Vandenberg AFB volunteers
- Artists
- Historians showing pivotal technology advancements.

How Can You Participate?

- Sign-up for a class booth (e.g. Physics, Biology, Geology, New or Historic Technology, Anatomy, Chemistry, Marine Biology)
or
- Have multiple student teams sign up for individual booths. Student teams develop a hands on activity or exhibit (Show or teach a Science, Technology, Engineering, Art, or Math concept)

- Get the word out and encourage teachers in the arts, clubs, ROP/CTE, history & technology to sign-up for a class or student booths.
- Volunteer to be a Point of Contact (POC) for your campus recruit teachers and students to sign up for booths.
- Get word out to community to participate May 29 from 6 to 8 pm. Offer incentives for students and families to participate (\$\$, A's).