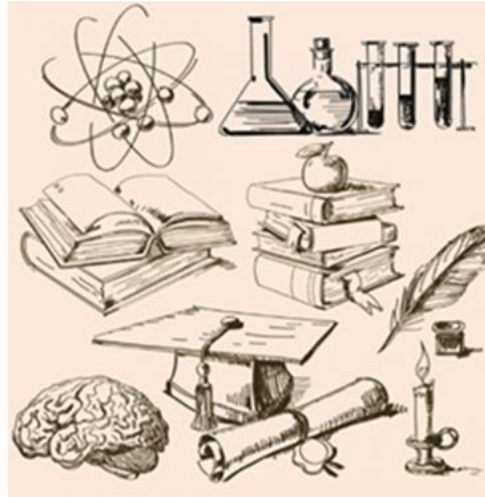


LUSD 2015

STE

Science
Technology
Engineering
Art
Math

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Festival

- Districtwide STEAM Community Outreach
- Friday, May 29, 2015, from 6 to 8 PM
- Lompoc High School Cafeteria & Surrounding Area

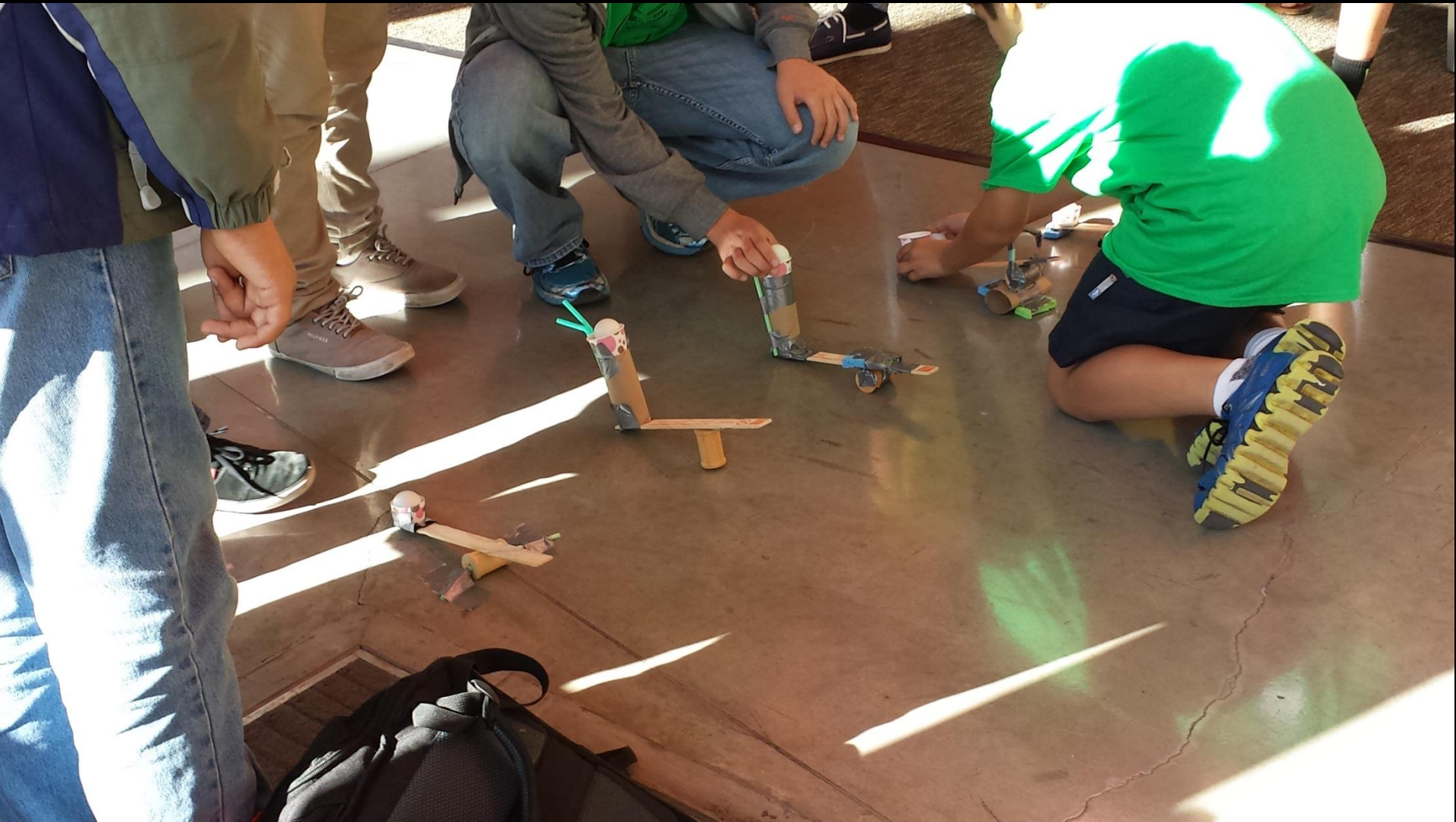
Purpose of this pitch is to persuade you to host a booth..... so who can host?

- Teacher groups
- Clubs
- Student groups (of approximately 2 to 6)
- 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.

Design & Engineer



Catapult Prototypes



Sliding Friction Demo



Wind tunnel test of student clay models





EXIT
ROUTE

108

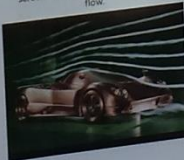
CAL POLY
MUSTANGS



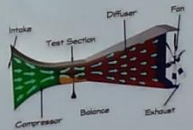
Wind Tunnel
By: Greg Ritter, Jared Geraets, Michael Wu, and Nick Laurita



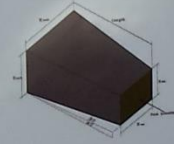
Compressor
The compressor constricts the space the air flows through which greatly increases its velocity. It also contains a screen that helps smooth out the air flow.



Test Section
The test section is where data is gathered and visual inspections are made.



Wind Tunnel
The first attempts to study aerodynamics were done nearly 300 years ago with nothing more than a spinning fan blade. It wasn't until the late 1800s that the first wind tunnel was designed and by the early 1900s the four component design had become widely used. Today the largest test tunnel is in Ames, Iowa with a test section of 80 by 120 and there are several hypersonic wind tunnels that can generate winds with speeds over 11,000 mph.



Diffuser
The diffuser gradually widens which allows the air speed to decrease and pressure to increase. This helps reduce the power needed for the wind tunnel and helps decrease draft.



Fan
The fan pulls the air through the test section. It is placed at the end of the test section so the air flows smoothly and is not choppy from the fan blades.

Helicopter build station





Recovery system
design test

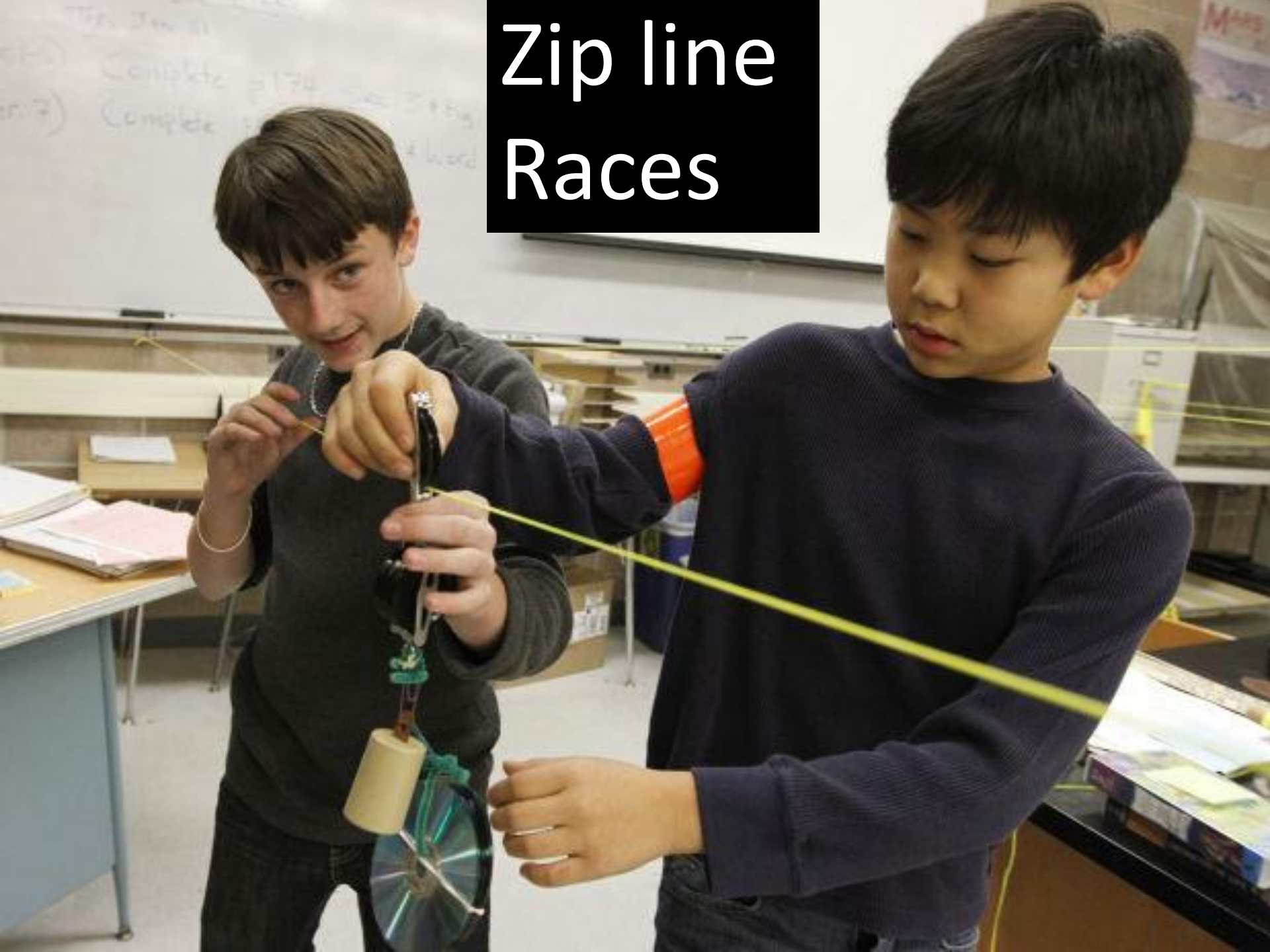


Trebuchet
Wall Buster



Hot Air
Balloons

Zip line Races





Newton cars

Kelp Holdfast Investigation





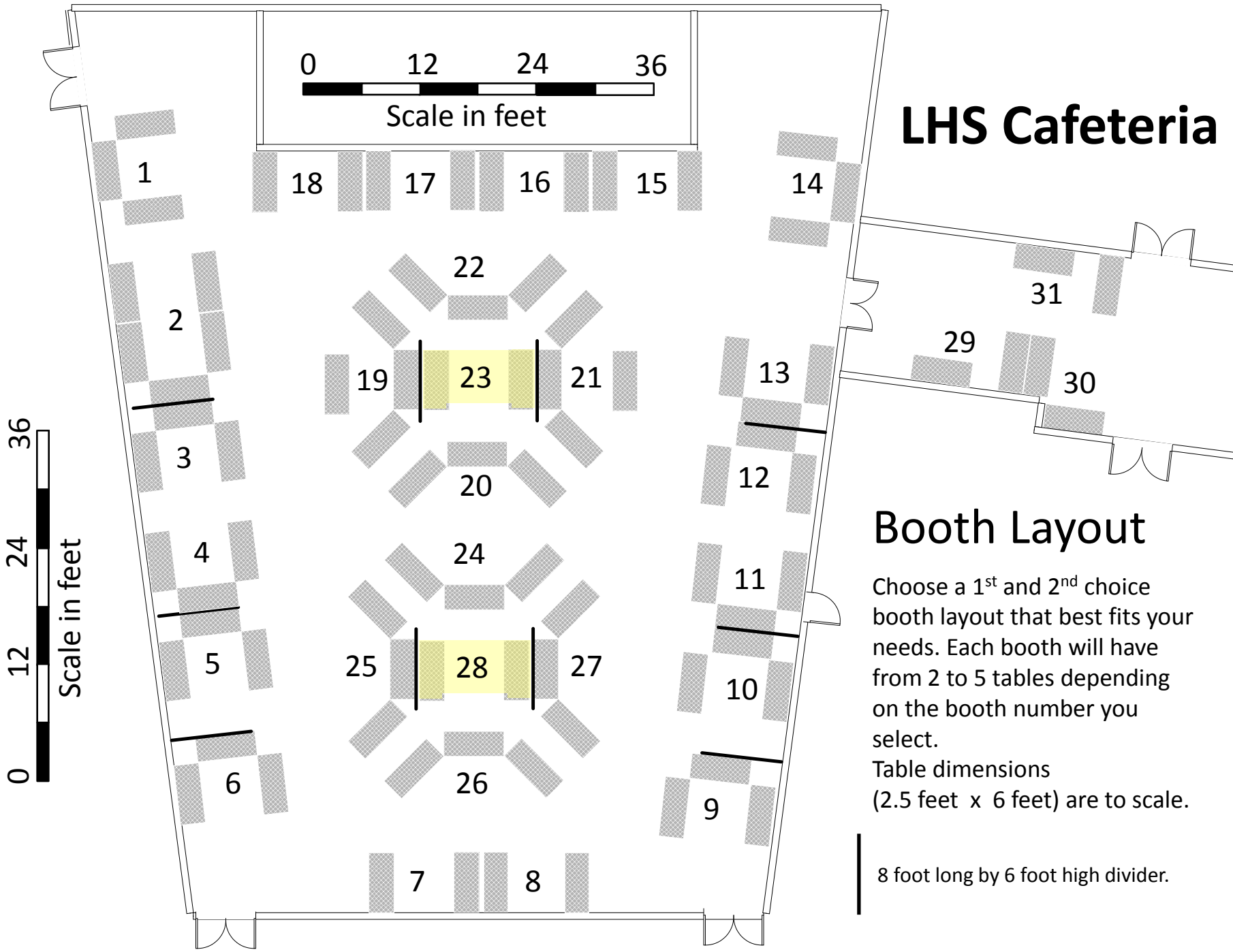


<https://www.flickr.com/photos/usasef/with/14628274421/>

How Can You Participate?

1. Sign-up for a class booth (e.g. Art design, Physics, Geology, New or Historic Technology, Anatomy, Chemistry, Marine Biology, Computer Science)
or
2. 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)

LHS Cafeteria



Booth Layout

Choose a 1st and 2nd choice booth layout that best fits your needs. Each booth will have from 2 to 5 tables depending on the booth number you select.

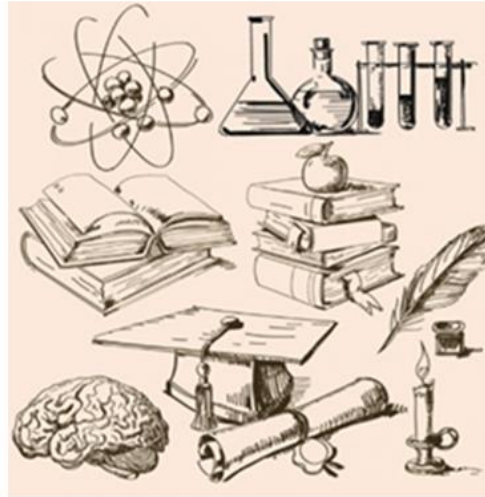
Table dimensions (2.5 feet x 6 feet) are to scale.

8 foot long by 6 foot high divider.

How else can you Help?

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

LUSD 2015



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Festival

Webpage: www.CCSTEMExpo.org