

California Polytechnic State University, San Luis Obispo
Building an Engineer Day

Cal Poly ASME partnered with Society of Women Engineers section for a day when over 200 middle school students came to Cal Poly. ASME put on the Mechanical Engineering lab. This lab consisted of a 5 minute introduction followed by a water balloon launching activity. The students were grouped by 4 or 5. They were given a work sheet to calculate the angle as well as the stretch length of the bungee cords for the water balloon launchers. A sample worksheet is below. The goal of the exercise was to hit the target. After each group tested their first and second try we typically allow them the chance to shoot a few water balloons for fun. It shows students how math and science can be used to make an accurate prediction. ASME specifically showed at least 80 students the lab and other students were able to ask questions if they stopped by. The Diversity Action Grant helped to fund the event; which included t-shirts for each student as well as lunch for everyone who was at the event.

Event Summary:

Partnering Organizations: Society of Women Engineers

Overall Attendance: 200

Girls: ~50%

Minorities: ~40%

Grant: \$800

Budget for Event: \$200

\$92.50 balloons, calculators, protractors, pencil

\$117.50 materials for water balloon launchers