



Celebrate National Engineering Week!

The Community Involvement Department invites you to make an Engineering Presentation to a local classroom during National Engineering Week.

- Choose a classroom (4th-8th grade - your own kid's class is a great place) and make arrangements to make a 45-60 minute presentation. Or let us know if you are available to present to a requesting teacher/classroom in the Albuquerque area and we will help you setup a visit.
- Come by IPOC/D1260 anytime to pickup resource materials (west end of IPOC – you can swipe in) – see below.
- Review the Explore Engineering presentation, the Sandia Overview and the Rhythm and Boom Video and download your choice for your use – available on <http://www.sandia.gov/ciim/ASK/home.htm> or customize a presentation that talks about your career (using only slides that have been through review and approval).
- Conduct your presentation – suggested outline (30-60 minutes)
 - Introduce yourself - talk a little about what you do and your educational path
 - Show a short presentation or video
 - Conduct an engineering activity
 - Ask for questions
 - Leave a limited number of Engineering Brochures with the teacher for interested students
 - Handout pencils
- Complete and return your National Engineering Week report to MS 1496
- Pat yourself on the back and hope you have convinced at least one kid to be an engineer – we sure need them!

Resource materials are provided by Lockheed Martin. Each topic contains several activities - some requiring materials (provided) and a few activities that do not require materials. The primary focus of each is to help students understand what engineers do, as well as the various disciplines in which engineers work You will choose one topic and one activity. Supplies are limited for each discipline, first come first serve.

- Engineering Overview
 - Demonstration of Making a Mobius band
 - Building paper towers
 - Designing an envelope and box
 - Waste not want not (materials included)
 - Amazing incredible triangle (materials included)
- Nuclear Engineering

- Demonstration of Understanding nuclear fission
- Nuclear energy applications
- It's Atomic
- Nuclear power
- Domino effect (materials included).
- **Mechanical Engineering**
 - Demonstration: The effect of friction
 - Up, up and Away
 - Centripetal force on objects in motion
 - And around we go (materials included)
 - What windmill (materials included)
- **Aerospace Engineering**
 - Demonstration: Testing glider designs
 - Heavy Matters
 - Building a parachute
 - Testing glider designs (materials included)
 - Who can build it best (materials included)
 - Just drop it (materials included).
- **Electrical Engineering**
 - Demonstration: The electrical circuit
 - Electrical charges
 - Basics about electricity
 - Turn out the light (materials included)
 - That's electric (materials included)
- **Systems Engineering**
 - Demonstration: Testing designs
 - It's Wet. It's Wild. It's Weird.
 - Spin it (materials included)
 - Sum of its parts (materials included)
 - Go measure (materials included)
 - Good vibrations (materials included).
- **Software Engineering**
 - Demonstration: The human microprocessor
 - Go Figure
 - Pixel this (materials included)
 - Move it (materials included)
- For more information, contact Amy Tapia at 284-5207 or email at astapia@sandia.gov or Jacque Anderson at 284-5224 or jacande@sandia.gov