



New Mexico

Governor's STEM Challenge

- ▶ Students in NM high school STEM classes statewide are invited to imagine, design, and develop a project model to address a question formulated by Los Alamos National Laboratory (LANL)
- ▶ Schools accepting the Challenge will utilize LANL's question as a co-curricular learning tool and case study in their STEM class curricula; though all STEM classrooms may participate, schools will choose a team of up to **10** students to submit a proposed solution
- ▶ Participating NM industry employers judge teams based on quality and degree to which answers reflect skills required for careers with NM STEM businesses, and award winning teams \$5,000 (\$500/student)
- ▶ Winning teams present at Statewide STEM Showcase and student team members are awarded varsity letters in STEM recognized by the New Mexico Activities Association for college admissions

Keeping the World Safer Using Technology

CHALLENGE THEME & PROPOSED TOPICS



August 30th, 2019

- Register your team via bit.ly/2YBNrxX
- Application must be approved by school principal



November 22nd, 2019

- Submit your team's prototype/plan to Statewide STEM Showcase Coordinator Anjeli Doty at adoty@lanl.gov, by 11:59 p.m.



December 7th, 2019

- Statewide STEM Showcase held in Los Lunas, New Mexico

CHALLENGE PURPOSE:



- Encourage students and teachers to incorporate and utilize Next Generation Science Standards in classrooms
- Recognize students in STEM statewide and emphasize local job potential
- Encourage diverse participants from underrepresented populations in STEM including minorities and girls
- Find more information and details online:
 - www.lanl.gov/community/education/stem-challenge
 - <https://webnew.ped.state.nm.us/bureaus/math-science>

TEACHER RESOURCES:

- Two-day weekend workshop in September, discussing Showcase criteria and how to incorporate project into classrooms using required NM STEM Ready! Science Standards
- Technical mentors for student teams through New Mexico State University and Northern New Mexico College partnership
- Co-curricular resources to use Challenge question in classrooms as problem-solving tool
- Professional development and supplies/materials through the NM Public Education Department
- \$500 stipend for teacher mentors and weekly virtual support



TEAM ELIGIBILITY & PROJECT DETAILS:



- All students grades 9-12 from NM high schools including private, charter, and public (home – educated students may join a public school team)
- Participating schools will create teams of **10** students and **2** teacher mentors to submit a written plan (10 pg. max) and 10-minute presentation of proposed solution
- Model and plan should: identify problem; convey the collaborative problem-solving process; include computational model, computer simulation, or physical prototype; and demonstrate strengths and weaknesses, modification, test results, and effectiveness

BENEFITS & AWARDS:

- Winning teams evaluated and chosen by NM STEM employers awarded \$5,000 (\$500/student) and invited to present at Statewide STEM Showcase before all companies, alliance participants, and other school teams
- All participating team students eligible to receive varsity letter recognized by the New Mexico Activities Association for college admissions
- Students will use and learn: teamwork, problem-solving, innovation, breakthrough technologies, STEM development, and presentation skills

