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 choose a team of up to **10** students to submit a proposed solution and present at the Statewide STEM Showcase on Dec. 7.
- 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). All student team members are awarded varsity letters in STEM recognized by the New Mexico Activities Association.

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

- Projects presented at Statewide STEM Showcase held in Los Lunas, New Mexico

New Mexico Department of Workforce Solutions · New Mexico Public Education Department · Los Alamos National Laboratory Est. 1943

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, University of New Mexico, and Northern New Mexico College
- 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:

- Students **present at Statewide STEM Showcase before all companies, alliance participants, and other school teams**
- Winning teams evaluated and chosen by NM STEM employers awarded $5,000 ($500/student)
- 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

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