

School: _____

Student projects

1. Grade level: _____ Project (circle one):
Science Engineering Technology

2. Grade level: _____ Project (circle one):
Science Engineering Technology

3. Grade level: _____ Project (circle one):
Science Engineering Technology

4th grade: **Design an Energy Device**
<https://njctl.org/courses/science/4th-grade-science/energy-natural-resources/attachments/design-an-energy-device-lab/>

Visit these websites for project ideas:

<http://www.ipl.org/IPLBrowse/GetSubject?vid=12&cid=3&tid=4317&parent=4278>

<https://www.sciencebuddies.org/science-fair-projects/project-ideas/list>

<https://student.societyforscience.org/science-project-resources>

Programming/coding websites:

<https://scratch.mit.edu> <https://Code.org>
<https://tynker.com> <http://appinventor.mit.edu>
<http://lightbot.com> www.alice.org



TRENTON BOARD OF EDUCATION
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"Children come first, Los ninos son primero"

2018 Next-Gen STEM/Science Fair (draft/proposed)



Board-agenda February 26, 2018

Hosted at each elementary
& middle school

March 9 – 23, 2018

Districtwide finals (top 4/school)

Wed., March 28, 2018

Ellis Auditorium 4 - 7pm

Mercer County Science & Engineering

Fair March 11– 14, 2018

Science, Technology, Engineering

Trenton Public School Students grades 2 through 8 create projects incorporating the 8 Science and Engineering Practices (8 SEPs):

1. Ask questions (for science) and define problems (for engineering)
 2. Develop and use models
 3. Plan and carry out investigations
 4. Analyze and interpret data
 5. Use mathematics and computational thinking
 6. Construct explanations (for science) & designing solutions (for engineering)
 7. Engage in argument from evidence
 8. Obtain, evaluate and communicate information
- ◇ Enter top projects **gr 4 - 12** into Mercer County Science & Engineering Fair (MSEF)
 - ◇ <http://www.mercersec.org/resource/registration> :
 - ◇ *Deadline* for entering projects into MSEF
 - ◇ **Sunday, February 25, 2018** for Middle School and High School
 - ◇ **Thursday, March 8, 2018** for Elementary School
 - ◇ **MSEF: Sun Mar 11 - Wed, Mar 14, 2018** at Rider University.
 - ◇ Students receive awards and recognition for top projects.

& Mathematics (STEM)

Goal: To provide a fun, challenging and inspiring forum which enhances students' interest in STEM disciplines.

Basic guidelines:

- ⇒ Each school hosts its own STEM/science fair from **Mar 9 to Mar 23, 2018**.
- ⇒ Schools *encouraged* to identify **one** STEM/ Science project which *can be entered into* the **Mercer Science and Engineering Fair**. Register projects by deadlines (**MS Feb 25th & ES Mar 8th**).
- ⇒ Mercer Science and Engineering Fair at *Rider University* **Sun, Mar 11 – Wed, Mar 14, 2018**; registered students are encouraged to attend MSEF on Sunday.
- ⇒ Schools submit names of **3 district-wide** contestants (one per grades 3 - 8) by **March 21, 2018**.
- ⇒ Top **3** projects from each school (3rd - 8th grades) at **District-wide NextGen STEM Fair** in **Ellis Auditorium** on **Wed. March 23, 2018**.
- ⇒ *2018 Next-Gen STEM Fair criterion checklist* based on Mercer Science & Engineering Fair <<http://www.mercersec.org/>> & incorporate the 8 Science & Engineering Practices (8SEPs).
- ⇒ Contact: jdunston@trenton.k12.nj.us or mtofte@trenton.k12.nj.us for more information!