

2017

ATLAS Elementary Science/Technology EXPO & STEM Fair



**Tuesday, April 18, 2017
6:00 - 7:30pm in the Cafeteria**

The Science EXPO & STEM Fair projects will be voluntary (Grades K-5 and eligible for entry under these categories: Technology, Engineering, Science Appreciation, Scientific Inquiry, and STEM).

Students can elect to submit projects by completing an experiment (**Scientific Inquiry**), researching and presenting information on a topic (**Science Appreciation and Technology**), or by designing an invention/concept/solution (**Engineering**), writing a science-themed story (**Science Fiction**), taking a machine apart to see how it works (with supervision and parent approval (**Reverse Engineering**), and creating innovative ideas for the environment (**Environmental Innovation**).

These multiple presentation choices give students a better opportunity to submit exhibits based on individual interests.

Here's how to participate in this year's Science EXPO & STEM Fair:

1. Choose a project category. Select one of the presentation options below.
2. **Register online at:**
<http://atlas elementary.oursciencefair.com/Register.aspx>, **or** by using the paper form on the next page by **March 31st**.
3. Bring completed project/exhibit to school by **8:00 am on April 18th**
4. Sign-up to volunteer on the night of the event!

Technology – Exhibits feature nanotechnology, computers, alternative fuel sources, cameras, cell phones and other areas of technology. Exhibits are informational and students showcase a piece of technology, how it is used, and its future potential.

Engineering - Exhibits feature a satisfactory solution to a need, such as improving an existing situation or eliminating a problem.

Science Appreciation – Projects exhibit student's informational research on a topic area. This category includes but is not limited to: animal sciences, astronomy, earth and planetary science, electricity and electronics, energy and power, environmental sciences, genetics and genomics, geology, health sciences, microbiology, ocean sciences, physics, plant sciences, sports science, and weather and atmosphere. (See www.sciencekids.co.nz for project ideas on many of these subjects.)

Scientific Inquiry – These projects are presented in the traditional question/experiment/result format. Projects begin with a measurable question, which might be based on an observation made or a particular topic of interest. Questions need to be something that can be measured, and will typically start with words such as what, when, where, how or why.

Science Fiction:

Science fiction is a genre of fiction dealing with imaginary, but more or less plausible content such as future settings, futuristic technology, space travels, aliens, etc. **Write a story** exploring the consequences of scientific innovations is one purpose of science fiction, making it a "literature of ideas".

Engineering (Reverse):

Reverse engineering is the process of discovering the technological principles of a device, object, or system through analysis of its structure, function, and operation. It often involves taking something apart and analyzing its workings in detail to be used in maintenance (with supervision and parent approval).

Environmental Innovation:

The Environmental Innovation category Is intended to provide a means of sharing environmentally innovative ideas. These ideas may be new products, procedures, inventions, promotional projects, community events, etc.

STEM Fair Guidelines--STEM is all around you! From your iPhone (Technology) to your allergy medicine (Science) to the vehicle that you take to get to school -Santa Clara River Bridge(Engineering) to your parents budgeting for groceries for dinner (Math), STEM is a part of everyday life!

- A STEM project is starts with a question or a problem to solve.
- The question or problem can concern any topic area – buildings, energy, environment, animal health, coding, robotics, etc...
- You want to be sure to choose something YOU are interested in – it makes projects more fun!

Traditional steps to complete your STEM project:

- Ask a Question
- Do Background Research
- Construct a Hypothesis
- Test with an Experiment
- Analyze Data
- Communicate Results

Parent/Community Volunteer Exhibit – Interactive displays created by parent/community members that showcase careers in the fields of Science, Technology, Engineering, and Mathematics. ATLAS Elementary strives to provide real world connections that inspire our students to persevere through tough subjects with the understanding that hard work leads to exciting opportunities. If you are a parent/community volunteer interested in exhibiting please contact Thérèse Palmisano at therese.palmisano@venturausd.org