Introduction and Pre-Registration & Pledge Forms
2027 Central Coast STEM Expo

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A note to the parents:

The 2027 Central Coast Science, Technology, Engineering and Math (STEM) Exposition (Expo) mission is to provide your son/daughter an experience into the world of creativity and thinking in science, engineering and mathematics. We hope they will consider a high-tech career in the future. Engineers, scientists and educators from Vandenberg SFB, the Endeavour Center, Lompoc Unified School District and the community are donating their time to run a first class STEM Expo.

We would appreciate your support by providing:

1) Positive assistance at home for the multi-month Science and/or STEM project endeavor. A continuous effort (1 - 2 hours a week) is much better for your son's/daughter's growth than a last minute attempt. It's very important for you to keep the enthusiasm going at home with constant encouragement and help. One way to do this is to take your son/daughter on a weekend nature or science trip relating to their project (i.e. science museums, etc.).
2) Transportation to the STEM Expo at Cabrillo High School Gymnasium will need to be provided by a parent or other responsible adult on the day and time you present your project for judging. You may elect to present your project for a judging slot on either Friday, May 2nd (5-6, 6-7, or 7-8 PM), or Saturday, May 3rd (8-9, 9-10, 10-11 AM, or 11-12 noon). If you are working with a partner(s) you must choose a time that works for both you and your partner(s).
3) Other Student STEM Events/Demonstrations will be going on in parallel with the STEM Expo on Saturday (for example High School Robotics, etc.) in the time when the students are not being judged. We strongly encourage you to participate and bring siblings.
4) Set up of the student science projects will be from 4:45 – 8:00 PM on Friday, or 7:30 – 8:00 AM on Saturday at the Cabrillo High School Gymnasium. An awards ceremony will be held Saturday evening, May 3rd (7-8 PM).

A note to students:

Already you probably have many questions, such as "What is a STEM Expo project supposed to look like?", "How is it to be put together?", "What am I supposed to choose as a topic?", "Who's going to help me?", "Once I choose a topic, then what?", "How is it going to be graded?". These questions, and others you may have, will be answered as you read through the ***General Entry Rules and Requirements*** available at **www.CCSTEMExpo.org** (see STEP 2) and/or when your science teacher provides it to you and fully explains this exciting activity).

One thing is certain, however, is that a STEM Expo Project is an involved endeavor, one that should not be taken lightly. It will require a great deal of your time with planning, researching, experimenting, evaluating, writing and constructing. So try to put a few hours a week into your project. Don't wait until the last few

weeks to begin working on the project. You will be much more competitive and confident in your presentation to the judges if you are we'll prepared and have practiced your speaking part ahead of time.

STUDENT THINGS TO DO:

1) Complete and sign the **Pre-Registration and Pledge Form** (**See Attachment 2 below**) and return to your school science teacher before **March 26th, 2027**. The form may also be found at **www.CCSTEMExpo.org** (click STEM Expo and see STEP 3).
2) Return all signed forms to your teacher who will guide you through the online registration at **www.CCSTEMExpo.org** or with the help of a parent you may complete the online registration, but insure your selected judging time has been coordinated with team members if you are working with partners.
3) Select a scientific inquiry project or engineering design demonstration that interests you. An engineering demo project is something like Robotics, 3D Printing, Electronics, Mechanical Devices, etc. and may not have a science experiment hypothesis and/or conclusion. If you select a demonstration and/or science inquiry project, you can provide a PowerPoint (PPT) presentation and/or a tri-fold table top presentation display of your work.
4) Read the **General Entry Rules and Requirements**. They can be found at **www.CCSTEMExpo.org** (see **STEP 1** on website)
5) Do not procrastinate and wait until the last minute to start your project.

PARENT THINGS TO DO:

1) Read and sign the **Pre-Registration and Pledge Form** (**See Attachment 2**). Select a time for your student to present for judging and indicate on this form. The form may be found below as **Attachment 2**, or on **www.CCSTEMExpo.org**. Coordinate the judging time with project partner(s) if working with one or more.
2) Sign the **Certification of Humane Treatment of Live Vertebrate** form if your son or daughter STEM Expo project involves live animals (**See Attachment 3**), or on **www.CCSTEMExpo.org**.
3) Complete the online registration at **www.CCSTEMExpo.org**
4) Insure student returns **Attachment 2** form to their teacher with signatures and judging slot checked by **March 26, 2027**. If they are working with live vertebrate animals, please include signed **Attachment 3** form
5) Plan to attend along with your student the Awards Reception at 7:00 pm Saturday evening (**See Attachment 1**, Agenda of events throughout the two-day event.
6) Encourage and actively participate with your son's or daughter's Science or Engineering Demo Project, but let them do the work.
7) Communicate with the school science teacher to make sure your son and/or daughter is making weekly progress on their Science or Engineering Demo Project.
8) Take your child to a Science Museum, industry tour, STEM event, etc. to motivate them prior to the Central Coast STEM Expo.

Please turn the page for attached Agenda, Pledge of Participation Signature Form and Certification of Human Treatment of Live Vertebrate Animals.

Attachment 1
2027 AGENDA

Friday, April 30, 2027

5:00 p.m. - 8:00 p.m., Cabrillo High School Gymnasium

- Students will be able to check-in Science Fair and/or Engineering Demonstration Projects. Students will be assigned a table display area with their chosen time for judging. When your time comes to be judged, be **prompt** and ready immediately when judges arrive. **NO EXCEPTIONS**. Realize judges will be on a tight schedule to complete activities within three hours, so be prepared. A well prepared and thought out presentation will be more pleasing to the judges when scoring points in the different areas.

Saturday, May 1, 2027

7:30 a.m. - 8:00 a.m. Cabrillo High School Gymnasium

- Beginning at 7:30 am and at any time up through 11:30 am, students/parents will be able to check-in projects, receive a table assignment with their chosen Saturday judging time. Parents and School Science Teachers who have volunteered to judge, supervise, or just plain participate are asked to arrive at 7:30 AM.

8:00 a.m. - 12:00 noon Cabrillo High School Gymnasium

- Saturday student Science Fair and/or STEM Expo project judging will commence. Students are invited to participate in our planned activities outdoors and in the cafeteria. Please do not hinder or hang around other students while they are being judged.

12:00 noon - 1:00 p.m. Cabrillo High School Gymnasium

- **Judging Team lunch hour**

1:00 p.m. - 3:00 p.m. Cabrillo High School Gymnasium

- **Judging Team awards decision meeting (Closed Session).** Students are asked to vacate Cabrillo High School Gymnasium at 1:00 pm so that preparations may be made for this evening's Awards Reception.

3:00 p.m. - 6:30 p.m. Cabrillo High School Gymnasium

- **Auditorium will be closed** to place projects with ribbons/certificates and prepare the auditorium for the Awards Reception. Student and parents are asked not to return early. We know all are excited to find out how they performed, but we must have this time to prepare.

6:30 p.m. Cabrillo High School Gymnasium

- **Auditorium will be open** for student/parents to arrive for the Awards Reception. Students are asked to keep project on display throughout the entire awards presentation. Please, informal attire is preferred. Individuals, parents, company representatives, or school administrators and faculty representatives presenting awards are asked to arrive at 6:30 pm to be briefed on order of presentation.

7:00 – 8:00 p.m. Cabrillo High School Gymnasium

- **Awards Reception commences**. Student/parents are asked to remove their projects immediately following the conclusion of the reception. Any projects intentionally left will not be able to be returned after this evening.

Attachment 2

2027 PRE-REGISTRATION & PLEDGE FORM

Please Complete, sign and *return to student's teacher before April 16, 2027*. After completing this form *students must then register online* at www.CCSTEMExpo.org (see **STEP 4** on website).

Student (First and Last name) _____ Check if working solo: _____

Check if working with a team: _____. If working with a team (maximum of 4 on a team counting yourself) list each member's First and Last names. If working solo, then leave blank:
1st:_____ 2nd:_____

3rd:_____

Parent's or Guardian's (First and Last name): _____

Home or Primary Phone (xxx) xxx-xxxx: _____ Work Phone (xxx) xxx-xxxx: _____

Email Address (best email to contact parents and student): _____

School Name: _____Student Grade Level (3rd thru 12th): _____

Teacher's Name _____

Project Title: _____

_____

Type of Project (Choose one): Science Inquiry: _____ ***OR*** Engineering Design Demonstration: _____

Science Inquiry Category (Choose one)**:** Animal Behavior _____ Biology/Microbiology _____ Botany _____
Biochemistry _____ Chemistry _____ Earth & Space Science _____ Environmental & Agricultural Sciences _____
Human Psychology/Social Sciences _____ Medical Science/Health _____ Physics/Energy _____ Zoology _____
Other _____ ***OR***

Engineering Design Demonstration Category (Choose one)**:** 3-D Printing _____ Aerospace Modeling _____
Alternative Energy _____ Computer Game Design _____ Computer Science _____ Energy and Motion _____
Engineered Car _____ Invention _____ Remote Operating Vehicle (ROV) _____ Reverse Engineering _____
Robotics _____ Rocketry _____ Rube Goldberg _____ Unmanned Aerial Vehicle (UAV) _____
Other _____

Judging Date and Time: Friday, May 13, 5-6 PM _____ Friday, May 13, 6-7 PM _____ Friday, May 13, 7-8 PM ____
Saturday, May 14, 8-9 AM _____ Saturday, May 14, 9-10 AM _____ Saturday, May 14, 10-11 AM _____
Saturday, May 14, 11-12 AM _____

Will you require access to an electrical power outlet? Yes _____ No _____.

Will your project fit on a 2.5 foot by 3.0-foot tabletop (and is no more than 8 feet high)? Yes _____ No _____.

Mandatory Signatures:
I pledge to work hard and complete my STEM Expo Project (Student): _____ date _____
If you sign-up for the STEM Expo, we expect you to complete your project. If for reasons outside your control you cannot participate after signing this form (death in family, etc.), notify your teacher ASAP.
I pledge to encourage my child to complete his/her Science Fair and/or Engineering Design Project.

(Parent Signature): _____date _____

If you have any other questions notify Mr. Stevens (266-6664, or email: tkstevens1@comcast.net).

Attachment 3

Certification of Humane Treatment of Live Vertebrate Animals

The California Education Code Title 2, Division 2, Part 28, Chapter 4, Article 5 51540 states in part that:

...Live vertebrate animals shall not, as part of a scientific experiment, or any purpose whatever:

a. Be experimentally medicated or drugged in a manner to cause painful reactions or induce painful or lethal pathological conditions.
b. Be injured through any other treatments, including but not limited to, anesthetization or electric shock.

Live animals involved shall be housed and cared for in a humane and safe manner.

Additionally, vertebrates used must comply with these International Science and Engineering Fair regulations:

1. All live or preserved animals or animal parts must be lawfully acquired from an approved source and their care and use must be in compliance with local, state, and federal laws.
2. The comfort of the animals shall be a prime concern. No research using vertebrate animals shall be attempted unless the following conditions can be assured: appropriate, comfortable quarters; adequate food and water; humane treatment and gentle handling. Care must be provided at all times, including weekends and vacation periods.
3. No experiment involving anesthetics, drugs, thermal procedures, physical stress, organisms pathogenic to human or other vertebrates, ionizing radiation, carcinogens, or surgical procedures, may be undertaken except under the direct supervision of an experienced and qualified biomedical scientist or designated adult supervisor.

I have read the above regulations involving the humane treatment of vertebrate animals and agree that animals used by _____ for his/her Science Fair project have been properly and humanely treated and will not be abandoned.

_____ _____

Date (Responsible Adult)

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AIAA The World's Forum for Aerospace Leadership

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