

# CONCEPT SCHOOLS STEM EXPOSITION

## ESSENTIAL INFORMATION

CS Stem Exposition is an event designed to encourage students to showcase the results of their stem studies and their science work. The purpose of the exposition is to apply knowledge and understanding of science, technology, engineering and math to conduct in-depth, “real-world” investigations and offer another venue for students to practice their presentation skills. The CS Stem Expo is open to all students, parents, and community members to enjoy hands-on activities and explore the excitement and opportunities that science offers.

The guidelines below provide step by step procedure for submission.

### A- DEFINITION

A demonstration is a scientific experiment carried out for the purposes of illustrating scientific principles, rather than for hypothesis testing or knowledge gathering. Our scientific demonstrations will be chosen for their combination of educational merit and entertainment value. Students are encouraged to use their knowledge and their inventive thinking to build a model or a prototype that demonstrates their learning. The quality of a demonstration will depend on several factors:

- Content/big idea review of literature
- Materials used
- Model/prototype (not applicable for all demonstrations)
- Oral presentation

### B- PARTICIPATION

- 1- The CS Stem Exposition is open to all students including grades 5 through 12 including public, private, charter, and homeschool students throughout the Midwest.
- 2- Schools may submit as many presentations as they feel necessary.
- 3- Participation for schools and students is free.
- 4- Student demonstrations are subject to a selection process. Those who are selected by the CS Stem Expo committee will qualify to present during the CS Stem Expo-2013 in Cleveland on March 9<sup>th</sup>, 2013.
- 5- A demonstration can be presented by individuals and/or a team of two students.
- 6- If a student is participating in the CS Stem Expo he/she may not participate in CONSEF’s project session.
- 7- The same student cannot participate in CONSEF’s project session and the CS Stem Expo at the same time.
- 8- A table will be provided to each presenter (max 6’). Additional space is subject to committee approval.

## C- CATEGORIES

CS Stem Expo categories include all science, technology, math, and engineering subjects.

## D- SUBMISSION REQUIREMENTS

- 1- Video recorded with clear sound and video images.
- 2- Video recordings should not be more than 5 minutes.
- 3- Recorded demonstrations must be uploaded to the school's YouTube account.
- 4- Schools determine the students eligible for CS Stem Expo submission
- 5- Eligible students fill out the CS Stem Expo online registration form, copy and paste their YouTube demonstration link for submission.
- 6- CS Stem Expo committee will announce the qualified CS Stem Expo presenters by February 11, 2013 in Cleveland.
- 7- Students presenting demonstrations during the CS Stem Expo must also submit the Consent form, and the Safety Assessment form.

*Note: Forms can be downloaded at [http://www.consef.org/?page\\_id=1708](http://www.consef.org/?page_id=1708)*

## E- SAFETY GUIDELINES

- 1- Schools have the primary responsibility for the student's safety.
- 2- All materials must be handled with caution before, during, and after the CS Stem Expo with the supervision of the school coaches.
- 3- Students must be equipped with a lab apron/lab coat, goggles, gloves, and all other necessary safety protocols.
- 4- Students are responsible for attending their demonstration during the entire fair.
- 5- First aid kit, eye-wash station, and a full-time nurse will be provided by the CS Stem Expo staff in case of emergency.
- 6- Safety checks will be held during the day of the event. Students violating the safety guidelines will not be allowed to present their demonstrations.
- 7- Schools have the primary responsibility for the proper disposal of hazardous materials. Stem Expo coaches should know the disposal procedure for materials including acids, bases, and corrosive materials.
- 8- Presenters are required to explain the disposal procedures in the safety assessment form that was submitted with your demonstration.
- 9- Audience safety is our highest priority. Presenters must explain the necessary safety guidelines that are involved in their demonstration before presenting. Fliers and extra safety handouts for the audience are welcome.
- 10- Any demonstration using open flames, strong acids, strong bases, and other materials producing toxic fumes are not accepted.
- 11- Electric outlets will be provided only for those who will use it during the demonstration.

## F- RUBRIC

1- The following rubric will be used for the selection processes.

- a. Knowledge Gained      10 points  
*Student understands the topic and mastered the scientific skills.*
- b. Oral Presentation      10 points  
*Presentation is clear and concise.. Student speaks fluently, makes eye contact, is polite, and shows dynamic interest in his/her subject. Does not rely heavily on note cards.*
- c. Entertaining Value      5 points  
*Content and the execution of the presentation is planned to captivate the audience's attention and provides enjoyment.*
- d. Student Creativity      5 points  
*Topic is original and the presentation method is highly creative.*

## G- DEADLINES

- o February 4<sup>th</sup>, 2013      : Video Submission (online),
- o February 11<sup>th</sup>, 2013      : Announcement of the qualified students
- o February 25<sup>th</sup>, 2013      : Consent form, Safety Assessment Form (needed for the qualified students only).

## H- TENTATIVE DAY OF THE EVENT SCHEDULE

March 9<sup>th</sup>, 2013. IX Center, Cleveland, OH

9:00 – 10:00	:	Registration and demonstration set up
10:00 – 12:00	:	Presentation of the demos
12:00- 1:00	:	Lunch
1:00- 2:30	:	Presentation of the demos
2:30-4:00	:	Award Ceremony
4:00	:	Dismantle of the demonstrations

## I- AWARDS

A certificate and \$30 monetary award will be given in the award ceremony for those who present demonstrations during the day of the event.