



LIVE INTERACTIVE LEARNING @ YOUR DESKTOP

Developing a Competitive Application for the Shell Science Lab Regional Challenge

Presented by: Sheila Smith

December 4, 2019

6:30 p.m. ET / 5:30 p.m. CT / 4:30 p.m. MT / 3:30 p.m. PT

Introducing today's presenter...



Sheila Smith

NSTA District VII Director
Arkansas, Louisiana, and Mississippi





National
Science
Teaching
Association

Developing a Competitive Application for the Shell Science Lab Regional Challenge

A Program of NSTA

Agenda



- The Award
- Eligibility
- Criteria for Judging
- Submitting the Application
- Award Submission Requirements
- Challenge Narrative to Answer
 - Science instructional strategies
 - Current and desired lab resources
 - Laboratory activity
- Questions



Shell Science Lab Regional Challenge

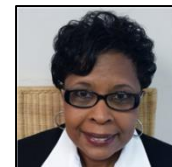
Eligibility



- Teachers of science in grades K-12, in the following targeted regions **ONLY**:
 - Mobile, AL
 - Martinez, CA (Martinez Unified School District, Mt. Diablo Unified School District)
 - Carson, CA (LAUSDs in Carson, Mormon Island, Van Nuys, Colton, Long Beach)
 - Convent, LA (St. James Parish, Livingston Parish)
 - Port Allen, LA (West Baton Rouge Parish)
 - Geismar, LA (Ascension Parish, East Baton Rouge Parish, City of Zachary SD, City of Central SD, City of Baker SD)
 - Norco, LA (St. Charles Parish, St. John Parish)
 - New Orleans, LA (Jefferson Parish, Orleans Parish, Terrebonne Parish, LaFourche Parish, Iberville Parish, Terrabonne Parish, St. Tammany Parish, La Fourche Parish, St. Bernard Parish)
 - Monaca, PA (Cen. Valley, Aliquippa, W.Beaver, Beaver, Rochester, N. Brighton, Riverside, Beaver Falls, Blackhawk)
 - Deer Park, TX (Deer Park ISD, Pasadena ISD, LaPorte ISD)
 - Kermit, TX (Kermit ISD, Pecos-Barstow-Toyah ISD, Wink-Loving ISD)
 - Puget Sound, WA (Anacortes SD, La Conner SD, Mt. Vernon SD, Burlington-Edison SD, Sedro-Wooley SD, Concrete SD, Conway SD, Mt. Vernon Washington SD)
 - Houston, TX (Region 4 Education Service Center)
- Teachers may submit an entry as an individual applicant or as a team of two teachers
- **A school may submit an unlimited number of applications**
- A teacher is limited to one application per year (whether submitting as an individual or team applicant)
- A school may win up to two prize packages total

Shell Science Lab Regional Challenge

The Award



Regional Winner elementary/middle prize package valued at \$10,000 includes:

- \$5,000 in Smithsonian Curriculum (one kit minimum) and Carolina Biological lab equipment
- \$5,000 in value NSTA prizes (\$1200 expenses, registration at STEM Forum, NSTA membership, Learning Center subscription, mentoring, training, banner, certificate, national press release)

Regional Winner high school prize package valued at \$15,000 includes:

- \$10,000 in Carolina Biological lab equipment
- \$5,000 in value NSTA prizes (\$1200 expenses, registration at STEM Forum, NSTA membership, Learning Center subscription, mentoring, training, banner, certificate, national press release)

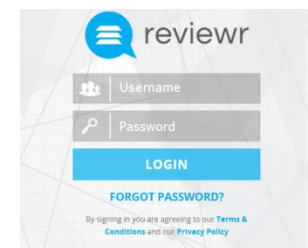
Grand Prize package valued at \$5,000 includes:

- Sponsored trip for teacher and principal of one elementary, one middle and one high school to the NSTA National Conference on Science Education in Boston, April 2 – 5, 2020

Selection Procedure



- The Regional Challenge Judges will select up to 72 regional finalists – Deadline January 15, 2020
- For the Shell Science Lab Regional Challenge go to: <http://www.nsta.org/shellsciencelab/regional.aspx>
- The Shell Science Lab Regional Challenge Judging Panel will review the received applications on **January 15, 2020**.
- To submit your application or nominate a colleague go to: the Shell Science Lab Regional Challenge page and click on the link at www.nsta.org/shellsciencelab/regional.aspx
- Create your account and begin the process
- You may save and continue your submission at any point until the deadline



The screenshot shows the login interface for 'reviewr'. It features a logo with three horizontal lines in a circle. Below the logo are two input fields: 'Username' and 'Password'. A blue 'LOGIN' button is positioned below the password field. At the bottom, there is a link for 'FORGOT PASSWORD?' and a small disclaimer: 'By signing in you are agreeing to our Terms & Conditions and our Privacy Policy'.

Submission Requirements for both challenges



Completed on-line application which includes:

- A narrative describing the applicant's science laboratory practices and innovative use of limited laboratory equipment and resources (see separate **Requirements for Narrative**)
- A letter of support/validation from principal or other education supervisor who can describe the merit of the applicant's work, and validate, attest to, or support statements made in the application narrative (1-2 pages)
- Resume or Vita with overview of teaching experience, education, community involvement, and previous awards/recognition (2700 characters = 1 page single spaced; submit Vita for each member of applicant team)



Narrative Question One

- Science Instructional Strategies -

Equivalent character count of *one paragraph* (1000 character count limit):

Briefly describe your:

- science teaching philosophy
- strategies you use to teach science
- Exemplar of past grand prize winner: Brown's teaching philosophy is that you learn science best by experiencing it through conducting investigations. Her current science lab equipment is limited and outdated, while the technological resources are restricted to a shared, grade-level computer cart. This school year Brown had to borrow dissecting tools from her college instructor so students could dissect a fetal pig. During the dissection students were enthusiastic during the experience and about the connections to content previously taught. Brown wants to provide her students with these learning opportunities consistently and not be concerned with how to obtain the materials. She wants to acquire project-based kits that incorporate inquiry-based activities and critical-thinking skills to create a strong foundation for active learning.

Narrative Question Number Two

Current and Desired Lab Resources



2700 character count:

- Describe:
 - your school's current laboratory facilities
 - what types of equipment and/or resources are in the facilities
- Explain:
 - why laboratory upgrade support is needed
 - how the lab upgrade would **impact** your teaching and the students' content knowledge

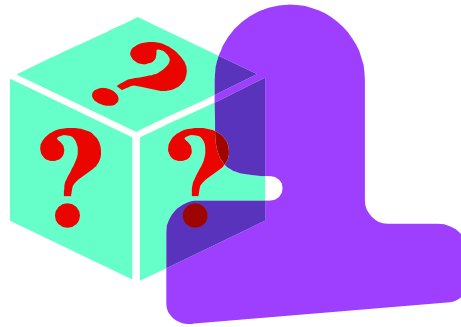
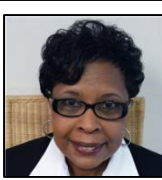
Narrative Question Number Three

Laboratory Activity



2700 character count (equivalent to 1 page single spaced):

- Describe an innovative, replicable lab activity that you have implemented using limited school lab resources with assessments
- Explain:
 - the purpose and outcome with materials needed
 - how the activity relates to State, national science education standards, and/or NGSS
 - how you address safety requirements with this lab activity
 - how you assess the activity



Let's pause for two
questions from the
audience

Criteria For Judging



- Demonstrated:
 - science inquiry innovation in the elementary, middle or high school classroom, with limited equipment and materials *impact and engagement* with students
 - **need for support** to improve science laboratory experiences
 - Support of science education science standards
 - Use of safety practices

Judges Look For



- The science strategies used with the limited lab resources that were described
- Students' understanding of science concepts
- The need for support for a lab upgrade and how the newly acquired resources would enhance students' science knowledge

Judges Look For



- Description of the lab activity that is innovative, grade appropriate, and can be replicated in other science labs
- Stated:
 - national/state standards; NGSS
 - safety requirements
 - assessments with the lab activity
 - purpose and outcome with materials needed for lab activity

Judges Look For



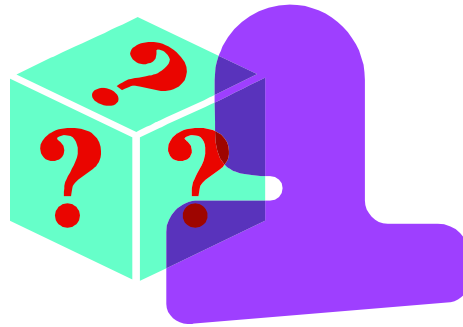
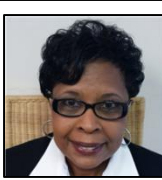
- The principal's letter:
 - attests to what is written in the application, supporting with additional statements
 - describes the merits of the applicant's work in the letter of support
 - addresses the need of lab upgrade



Need More Info?

- You can send questions after the presentation to shellsciencelab@nsta.org
- Visit the website at <http://www.nsta.org/shellsciencelab/regional.aspx>





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Shell Science Lab Regional Challenge



Thank you to Shell, Carolina Biological Supply Company and NSTA for partnering to recognize outstanding elementary, middle and high school programs for exemplary approaches to lab instruction utilizing limited lab resources.

Thanks to today's presenter...



Sheila Smith

NSTA District VII Director
Arkansas, Louisiana, and Mississippi





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