

SHELL SCIENCE LAB REGIONAL CHALLENGE

A PROGRAM OF NSTA

CHALLENGE SUMMARY

Shell and the National Science Teachers Association (NSTA) have partnered to recognize outstanding elementary, middle, and high school programs for their exemplary approaches to science lab instruction utilizing limited school and laboratory resources. The Shell Science Lab Regional Challenge will showcase the work of teachers, representing their schools, who submit innovative, replicable strategies to deliver quality lab experiences with limited equipment/resources. This program will award teachers/schools with additional tools, resources, and rich professional development opportunities needed to support high-quality science teaching and strengthen their existing capabilities.

AWARD

- ★ One elementary and one Middle School from each asset will each receive a lab makeover with professional development support package* valued up to \$10,000**.
- ★ One High School from each asset will receive a lab makeover with professional development support package* valued up to \$15,000.
- ★ Prizes include lab equipment from Carolina Biological Supply Company (\$5k for elementary/middle; \$10k for high schools), NSTA STEM Forum on science education, NSTA membership, NSTA Learning Center.
- ★ A grand prize school will be selected for each grade band, the winning school's principal and teacher will receive an additional prize package to attend NSTA's national conference on science education.
- ★ The Grand Prize Winners and their principals will be honored at the Teacher Awards Gala and Shell Reception at NSTA's National Conference on Science Education, during the second year.

**Each elementary and middle school will be required to order the Smithsonian kits as part of their support package.

*Professional development includes the Smithsonian Institution (k-8); Carolina Biological; and the NSTA Learning Center.

ELIGIBILITY

- ★ Applicants will be individual teachers of science in grades k-12, representing their schools in the following targeted areas near Shell assets:
 - 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, St. Tammany 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, Midland 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)
 - Houston, TX (Region 4 Education Service Center)
- ★ Each teacher is limited to one application per year
- ★ Schools may submit an unlimited number science teachers of applications annually, and each school is limited to winning two prize packages in total

Key

SD = school district

ISD = independent school district

USD = unified school district

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SELECTION PROCEDURE

The Shell Science Lab Regional Challenge Judging Panel will review applications (due January 22, 2021) and select up to 72 regional finalists (2 in each grade band of regions listed above). Regional finalists will be asked to provide additional responses, including a 3-5 minute video (due January 22, 2021) that displays the school's current science classroom or lab facilities and provides further explanation of how winning equipment/resources would make a difference in the applicant's science teaching, and in the learning experiences for students. The Judging Panel will review the regional finalist submissions and select 36 regional winners, and will select Grand Prize winners from the pool of regional winners, for year 2 recognition.

CRITERIA FOR JUDGING

Demonstrate:

- ★ Innovative science inquiry in the classroom with limited laboratory equipment, materials, and resources
- ★ Impact and engagement with students and community
- ★ Need for additional professional development and science materials
- ★ Use of NGSS, state and/or national standards
- ★ Use of safety practices (<http://www.nsta.org/about/positions/liability.aspx>)
- ★ Agree to provide pre and post impact assessment of students performance, professional development at NSTA conferences, and Carolina Biological materials used, and Smithsonian curriculum at the K-8 levels

AWARD SUBMISSION REQUIREMENTS

- ★ A narrative describing the applicant's science classroom instructional practices and innovative use of limited laboratory equipment and resources (see Requirements for Narrative)
- ★ A letter of support signed and on school letterhead from the principal or other education supervisor who can describe the merit of the applicant's work and validate, attest to, for support statements made in the application narrative (upto 2 pages)
- ★ Resume or vita—with overview of teaching experience, education, community involvement, and previous awards/recognition;
- ★ A narrative describing applicant's science laboratory instructional practices and innovative use of limited laboratory equipment and resources must include (characters are individual letters or spaces in a document):

REQUIREMENTS FOR NARRATIVE

Science Instructional Strategies (one paragraph, 1000 character count including spaces)

Explain:

- ★ your science teaching philosophy
- ★ strategies currently utilizing to teach science

Current and Desired Lab Resources (1 page maximum; 2700 characters including spaces)

Explain:

- ★ your current lab facilities, equipment, and/or resources
- ★ why laboratory upgrade support is needed
- ★ how a lab upgrade would impact your teaching, and your students' content knowledge.

Laboratory Activity (1 page maximum; 2700 characters including spaces)

Describe:

- ★ an innovative, replicable lab/science class activity that you have implemented using limited school lab resources with impact assessments
 - Purpose and outcome with materials needed to implement lesson
 - List any standards used (i.e. NGSS, state and/or national standards)
 - List of safety challenges and how you address them. (www.nsta.org/about/positions/safety.aspx)

Completed applications must be received by January 22, 2021. Use the on-line submission form at www.nsta.org/shellsciencelab/regional.aspx to complete your application. Questions send e-mail to shellsciencelab@nsta.org.