

SDSTA

South Dakota Science Teachers Association

Fall Issue | Date: September 24, 2018

Dear Members,

I hope the beginning to the new school year has found you well. It was fun seeing all the fresh faces and excited look of the newest additions to our classes. I hope that you are finding new ideas to try in your classrooms. If you need some new ideas, look to our @SDSTA Twitter account or SDSci on Facebook. There you will find a wealth of resources and others willing to help. We would love to see your success stories and great ideas you have.

Our upcoming conference is shaping up to be one of our best. We changed the name, we changed the format, and we have some world class speakers eager to share their knowledge with you. The SD STEM Ed. conference will not disappoint! Hope to see you in Huron February 7th-9th! In the near future you will be receiving an email about ordering some new SDSTA branded clothing! We have partnered with a print shop in Watertown to create an online store for a members only clothing line. Items will include ¼ zips, polos and jackets. We would love to see you all sporting our beautiful logo! Shipping will be available.

You will also notice that our webpage has gone through a bit of a makeover. Special thanks to Michelle Bartels for creating a beautiful new web presence for us. There you will find all things SDSTA and a landing page for the new SD STEM Ed. Conference. While there, take some time to fill out your online registration and session proposals for the conference.

For those of you who may be interested in the latest science conversations in the educational community, please be aware that once a year, the National Congress on Science Education meets to discuss issues that may be of interest to NSTA and science education. There are 94 NSTA Chapters and Associated Groups aka CAGS. SDSTA is one of the 94 chapters/groups, and we are responsible for sending a voting delegate to the annual meeting. This year's meeting took place in Little Rock, Arkansas and was a rewarding experience that allowed me to network with several state presidents and get some customized professional development to assist me in leading SDSTA.

If you are interested in looking over the minutes of this meeting, a summary has been provided here: <http://bit.ly/2D8F4np>. My hopes are that you will enjoy this fall edition of our newsletter. Julie Olson and Michelle Bartels spend loads of time on putting this together for your professional entertainment!

Your thoughts and ideas are always welcome, so if you have something to share please forward it to either of these two people, and they will do their best to accommodate our members. Also, it is my sincere wish that your 2018-19 school year be the best ever and that you continue a lifelong learning process to improve your teaching pedagogies. Remember to get your applications in for presenting at the 2019 Conference, and get registered now to attend!!

Best Regards - *Mark Iverson, SDSTA President*

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SAVE THE DATE!

THE JOINT CONFERENCE is now

SD STEM Ed Conference

FEB. 7-9, 2019

After careful consideration by the SDCTM/SDSTA joint board, the decision has been made to change the joint SDCTM/SDSTA conference title to SD STEM Ed Conference. STEM is more inclusive for subject areas including math and science, but also engineering, CTE, and computer science. Additionally, STEM professional development has become a priority in the budgets of many districts and departments. Only the name is changing! The format and overall excellence of the annual conference will remain the same. Don't worry. The quality and variety that you have come to expect will be unchanged. Mark your calendars for Feb. 7-9 for the 27th Annual SD STEM Ed Conference in Huron!

Advance Registration Option 1: Print the conference registration form on the following page and mail it with your payment to Sheila McQuade. Advanced registration must be postmarked by January 20, 2019.

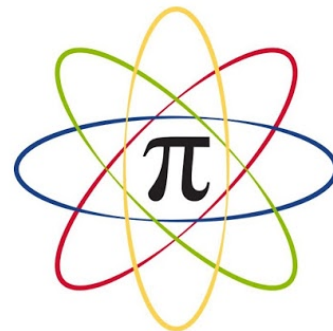
Advance Registration Option 2: You may register on-line at <https://goo.gl/forms/Uz0UzwMnNjwTkdv2>

- Online registration closes January 20, 2019 - all online registrations (requires payment via PayPal) must be paid by January 22, 2019 or they will be cancelled.

On-site registration: On-site registrations will continue to be an option but will be charged a \$35 late registration fee. *A limited number of banquet tickets will be available — there is not a guarantee of available banquet tickets with on-site registrations.*

REGISTRATION DEADLINES:

- Advanced, mail-in registrations— **1/20/19**
- Advanced, on-line registrations— **1/22/19**
- Late, on-site registrations— incur a \$35 late fee



SESSION PROPOSAL

Consider putting together a session to share with other educators from around the state.

I SUBMITTED A
CONFERENCE PROPOSAL



AND, IT WAS ACCEPTED

- Submit as many sessions as you want but you may not get acceptance of all.
- Both workshop or presentation style welcomed.
- Presenters must be registered or exhibiting at conference
- You will receive confirmation of acceptance by December 1.

Projectors will be supplied as needed. Other materials or technology is the responsibility of the presenter.

<https://sites.google.com/k12.sd.us/sdsta/sd-stem-ed-conference>

Due October 31, 2018



2019 SD STEM Ed Conference

Hosted by SDCTM and SDSTA



Conference information and program booklets will be available online at www.sdctm.org and www.sdsta.org

ADVANCE REGISTRATION

Huron Event Center, Huron South Dakota
February 7-9, 2019 1-800-876-5858

Download and complete this form. Postmark by January 20, 2019. After this date, please register on-site (+\$35)

Name

Permanent Address

City State Zip

School/District E-mail

Home phone School Phone

1. SDCTM/SDSTA MEMBERSHIP(s) and DUES

Please check the appropriate categories. You may join one, both, or neither organization.

Begin/renew SDCTM (math) for one year

- Elementary \$5
- Middle School \$20
- High School \$20
- Post-Secondary \$20
- Student \$5
- Retired \$5
- Other \$20

Begin/renew SDSTA (science) for one year

- Elementary \$5
- Middle School \$20
- High School \$20
- Post-Secondary \$20
- Student \$5
- Retired \$5
- Other \$20

NOTE: First year teachers are eligible for a scholarship providing a free registration. See www.sdctm.org for details.

2. CONFERENCE ADVANCE REGISTRATION (+ \$35 On-site/after Jan. 20)

Please select the appropriate categories. Noon luncheon is included for each day that you register.

NOTE: The Friday night banquet is **NOT** included. Banquet tickets may be purchased for \$25 each.

I will attend the conference on (check one): Friday Saturday Both days

SDCTM or SDSTA Member

- One day \$55
- Two days \$80

Non-Member

- One day \$105
- Two days \$130

Student Member

- One day \$15
- Two days \$25

College credit will be available; information/registration will be available at the conference registration table.

3. PAYMENT: By Check Only

Make checks payable to SDCTM/SDSTA JPDC.

SD STEM Ed does **NOT** accept purchase orders.

To use credit card, you **must** register and pay **ONLINE**:

Membership(s) total	\$	<input type="text"/>
Registration	\$	<input type="text"/>
Friday Night Banquet (\$25 each)	\$	<input type="text"/>
On-site Late Registration Fee (+\$35)	\$	<input type="text"/>

TOTAL ENCLOSED \$

Requests for refunds must be received by January 20, 2019
The conference does not issue refunds due to weather events.

4. SEND THIS FORM WITH PAYMENT

Sheila McQuade

3201 S Kiwanis School phone (605) 336-3644

Sioux Falls, SD 57105 Home phone (605) 371-1803

If you have not received email confirmation of registration after one week, please contact: smcquade2@sfcss.org.

Advance registration must be postmarked by **January 20, 2019.**
After this date, please register on-site (Additional \$35 fee).

Please check here if you have also submitted a speaker proposal form for the 2019 Conference.

Contact SD STEM Ed with any special needs requests as defined by ADA by emailing cindy.kroon@k12.sd.us by January 20, 2019.

Your contact information may be shared with Conference Exhibitors/Sponsors. Check here to opt out of sharing your contact information.



Learn about the K-12 educational on-line content, resources for parents and teachers, internships and student partnership programs, and national events (Science Bowl, bridge building contest, model cars, etc.) through the new Science, Technology, Engineering and Math (STEM) Rising initiative at the US Dept of Energy.



U.S. DEPARTMENT OF
ENERGY

The Science of Baking

This info-graphic offers simplified explanations of the science of how and why common baking ingredients transform into cookies, cakes, and other baked goods. The ingredients mentioned are flour, shortening, leavening, eggs, sugars, and salt. Middle level and high school teachers can use this visual guide to help students understand what happens during the baking process.



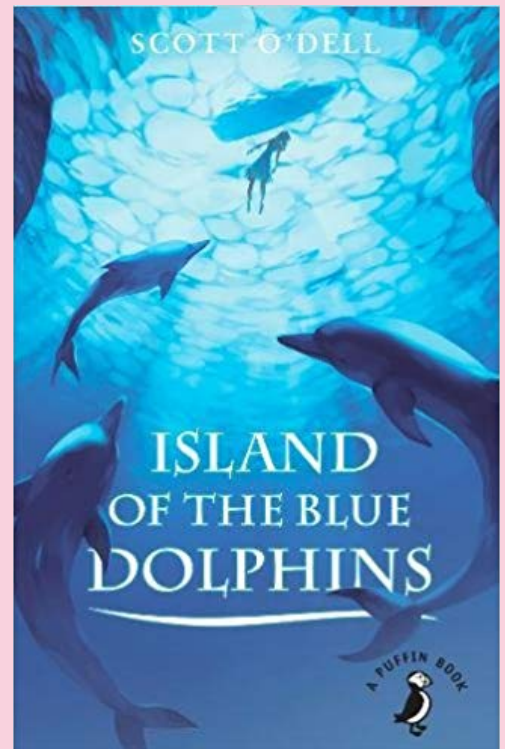
World Wetlands Day Activity Guidebook

This guidebook for K-12 educators presents five environmental science lessons exploring the ecological, economic, and cultural importance of wetlands. Created by the Maryland Coastal Bays Program, the lessons support the Next Generation Science Standards and are available for elementary, middle, and high school levels. The elementary lessons—Wetland Artist (grades PreK-K), I Spy the Baby! (grades 1-2), and Staying Dry in a Wetland (grades 3-5)—focus on understanding the characteristics of wetlands animals and habitats. The middle level lesson—Local Land Use Planning (grades 6-8)—teaches students about the many considerations necessary when designing a town and the complex relationships between human development and environmental concerns. Water Chemistry in the Maryland Coastal Bays (grades 9-12) teaches high school students about water chemistry and health and provides opportunities for data analysis. The book also includes printable resource pages and student handouts for each lesson.



Island of the Blue Dolphins On-line – National Park

In 1960, Scott O'Dell wrote *Island of the Blue Dolphins*, a historical fiction novel for young adults based on the life of a Native American woman who spent 18 years in isolation on San Nicolas Island, one of eight Channel Islands off the southern California coast. The novel remains a favorite reading in many K-college classrooms, and NPS has developed a website for teachers (including science teachers) to enhance its use. The website offers primary and secondary source materials related to the 19th-century events and people that inspired the novel. For example, the website highlights several natural and cultural resources mentioned in the book (and currently protected in Channel Islands National Park), including images and footage of elephant seals, cormorants, kelp beds, and archaeological sites. In addition, the site offers writing prompts and classroom lesson plans, adaptable for a range of levels from elementary to university, that provide opportunities for students to reflect on the reading and deepen understanding.



Sanford Underground Resources

The Sanford Underground Research Facility in Lead, South Dakota has a fantastic educational outreach team that works to bring relevant research into our classrooms. They provide professional development during the summer, classroom presentations about research happening at the lab, and even created curriculum kits that are aligned to the South Dakota Science Standards. Their curriculum kits are banded by grade level and come in a variety of topics, and they are always creating more. In my classroom, I piloted the middle school unit on phase changes, Argon Transfer Challenge, and recently completed the biology unit, Perplexing Puddles. Both of them were phenomena-driven and allowed students to ask scientific questions and solve problems. The kits include all of the materials needed, including a teacher guide and any student handouts or articles.



I was going to become a polymer scientist, but didn't because I thought the work would be too repetitive.


NASA Citizen Scientists

Looking for ways to engage your students in real-world science? Check out NASA's Citizen Science website to find opportunities for students of all levels, from elementary to adult, to contribute to NASA research. Listed alphabetically and color-coded for ease of identification, the page presents descriptive annotations and links to more than a dozen engaging projects exploring various aspects of the universe, solar system, Sun, and Earth. Cosmo Quest participants, for example, help analyze more than 15 million images taken by astronauts aboard the International Space Station. Working from computers, students view the images and identify geological features or challenge themselves to find the exact location of the image. In the S'COOL (Students' Cloud Observations On-Line) project, students are "Rovers" (roaming cloud observers) who collect data on cloud type, height, cover, and related conditions to validate satellite data and provide scientists with a more complete picture of clouds in the atmosphere and their role in interactions in various Earth systems.



Bring the Park to Your Classroom Classroom

Submitted by Lindsay Kortan

My family and I vacationed in Colorado and visited Rocky Mountain National Park this summer. If you would like to bring the Rocky Mountains to your classroom, the National Park Service offers free teacher guides and distance learning opportunities to connect classrooms and the Rocky Mountain National Park Rangers. The resources specific to the Rocky Mountains can be found at the following link: 

Several other National Parks, including the Badlands and Wind Cave in South Dakota, have distance learning opportunities as well as other classroom resources.



SKYPE A SCIENTIST

Submitted by Ali Bowers

Looking for a way to make science relevant to your students? Check out Skype a Scientist! This program, run by Sarah McAnulty, science communicator and Ph.D. candidate at the University of Connecticut, connects scientists with teachers with the goal of communicating via Skype (or any other video messaging program) about the scientist's research. These conversations allow teachers to bring in relevant, new research and help their students see scientists as real-life humans. Signing up is easy, for both scientists and teachers. Visit the website www.skypeascientist.com and you'll see two large buttons, one for teachers and one for scientists. Matching occurs roughly every two weeks and you can sign up as often as you wish. The sign-up form also gives you the option to choose the topic of research you are interested in and the time-frame that would work best to Skype. 

Beyond Benign - Chemistry Resources for K-5, MS, HS


Beyond Benign develops and disseminates green chemistry and sustainable science educational resources that empower educators, students and the community at large to practice sustainability through chemistry. We work directly with educators and a network of strategic partners focused on science education, sustainability, innovation and initiatives supporting human and environmental health to provide an educational continuum from K-12 to higher education with an important community engagement component. The new school year has kicked off, and we are hitting the ground running! We had a very busy summer of events, and are excited about the growth we are experiencing.

We have launched new elementary and middle school curriculum which is free to download on our website.



beyondbenign
green chemistry education

SSERC - CHEMISTRY RESOURCES


Scottish Schools Education Research Centre - There are now quite a few resources for teaching chemistry uploaded onto our website. They are linked to, where possible, from all the appropriate outcomes at the various curricular levels. In addition, they can be browsed en masse from the link.  Previously the resources were arranged into workshops, demonstrations or 'other chemistry experiments'. This is not particularly helpful if you don't know what group an experiment is in so they are now in a single alphabetical list - there will also be an index coming soon to help you locate the experiment you want.

The only form of separation is that the microscale activities are on their own page with tabs for the experiments, equipment making etc. In order to give a bit of guidance as to usage, in the summaries we have used the following suffixes (c) for a classroom experiment (d) for a demonstration and (i) where we think it is suitable for investigative work. We also make suggestions as to the age groups they are suitable for. As always, though, these are merely suggestions: use them as you will.



SD 4H STUDENT RESEARCH

SD 4-H is looking for your help reaching out to SD youth who have an interest in the environment, food, fuel, agricultural animals, nutrition, biotechnology, or agricultural economics. We have an opportunity for these youth to do some research and engineering and compete for scholarships. For students who are already participating in science fairs and FFA activities like Ag Issues and Agriscience Fair, this would take their existing work and projects to the next level. For those of you who participate in projects like GLOBE, this would also be an opportunity for youth to look further into those topics and how they directly impact their lives.

The opportunity is the SDSU Science of Agriculture  program.

Much like a science fair project, the students are selecting research topics that are important to them and are working under the guidance of a teacher, parent, or other coach. They are also working directly with University and Industry professionals who serve as experts in their topic field. Beyond the research and engineering, the youth also work on public speaking and communication as they share their project out to the public via public presentations and written communication.



Sanford Teacher Awards

We're calling on ALL teachers, faculty, staff, principals, parents, students, and anyone else to nominate an extraordinary, inspirational teacher.

You know the one - the one who comes up with creative ways to teach that make students love learning; the one who stays late to help a student who needs a little extra support; the one who genuinely cares about students and shares in their hopes and dreams for their future. Tell us about this teacher. Nominate an A+ inspirational teacher - it may even be yourself - by Monday, October 22, 2018. Fill out the form and tell us why this teacher is so inspiring. We will select ONE winner to receive the \$50,000 grand prize. The selected remaining finalists will win \$10,000 each - one winner per U.S. state. Winners will attend a special celebration in their honor in November 2018. Nominate someone by October 22, 2018.



THE SANFORD PROMISE
Inspiring the next generation of scientists.

2018-19 K-12 SCIENCE EXPERIENCES

The mission of the Sanford PROMISE is to increase the community's understanding of science and their awareness about the benefits of research to our society. Visit us online at: www.sanfordresearch.org/education, connect with us at 605.312.6417 or SanfordOutreach@sanfordhealth.org to learn more about these programs or to inspire us with your own ideas for connecting youth, educators, and scientists!

Visit the **Sanford PROMISE Community Lab** for a tailored, hands-on experience in the heart of Sanford's working research facility to learn what it takes to be a biomedical scientist through hands-on activities, tours, and interactions with Sanford scientists.

Middle Level Biomedical Exploration

In early March we set aside a week for large middle school groups to learn about how biomedical scientists work towards finding the *cure to cancer*.

Research Shadowing

Students age 16 and older explore a working research lab environment and learn about the qualities required for a career in biomedical research. Teachers are invited to shadow too!

PROMISE Scholars

Immersive research experience for rising high school seniors. Juniors apply in fall 2018 for summer 2019 experiences.

Science Discovery Days

In November 2018 and April 2019, we invite high school sophomores and juniors to connect with regional scientists and biomedical researchers through interactive career presentations and exhibits from area industries and universities.

Elementary Inquiries

K-6th grade students practice the research process with hands-on activities. *Science to make you sweat* (K-2 grade, October 2018); *Diabetes: Finding the Cure* (3-6 grade, December 2018); *Power-up Brain Science* (K-2 grade, January 2019); *Enabling Technologies* (3-6 grade, May 2019).

Check the website often for student and teacher workshops in summer 2019 and additional events and opportunities.

Like Sanford Research on Facebook

Follow @SanfordPROMISE on Twitter

SANFORD
RESEARCH

SDSTA APPAREL STORE!!!!



<https://sdscienceteachersassociation.itemorder.com>

Polos, Quarter-Zips, Backpacks

First orders due by September 30. Ordering is open until the conference but may take longer and have less choices so order early!



ABOUT US

The National Science Foundation (NSF) created the first Experimental Program to Stimulate Competitive Research (EPSCoR) program in 1980. Its success led congress to expand the program and since 1990 create EPSCoR-like programs in several federal agencies, including: USDA, NIH, DoD, DoE, NASA and EPA.

Now named the Established Program to Stimulate Competitive Research, EPSCoR identifies develops, and uses a state's academic science and technology resources to support its economic growth and promote a more productive and fulfilling way of life for its citizens. EPSCoR acts on the premise that universities, their science and engineering faculty, and their students are valuable resources that can influence a state's development in the 21st century. To achieve this goal, NSF provides lasting improvements to the state's academic research infrastructure that increase its national research and development competitiveness.

Research

- EPSCoR recognizes that universities are valuable resources. Their science and engineering programs, as well as faculty and students, are major assets to the state. Currently, SD EPSCoR supports facilities, faculty, students, and equipment at South Dakota Universities.
- EPSCoR/IDeA universities, their faculty, and students are leading the way in the 21st century. These researchers are needed for the nation to meet its most pressing priorities in health, cyberinfrastructure, and homeland security. A broad science and technology base is especially important in an era when different regions have unique issues involving resources, health, security, and the environment.
- Scientific and technological research cannot be limited to a few states if the nation is to maintain world leadership and reach its full potential. Along with stimulating competitive research and promoting excellence in education, EPSCoR/IDeA improves access to that high-quality education and cutting-edge research, expands economic opportunity, creates jobs, and improves the quality of life across the nation.

Economic Development

- To nurture economic development in South Dakota, SD EPSCoR partners with the SD Governor's Office of Economic Development, the SD Office of Commercialization, and the SD Board of Regents. Through these collaborations business/technology education programs are created.
- Global competition demands a highly skilled workforce, and the country's economic future depends on scientific and technological advances everywhere, not just in a few places. Through EPSCoR/IDeA, participating states and territories are building a high-quality, university-based research infrastructure, a backbone to their scientific and technological enterprises, and a strong and stable economic base into the next century.

Education

SD EPSCoR promotes and supports educators, research faculty, and programs in the areas of science, technology, engineering, and mathematics (STEM).

- Advances in science and engineering are essential for ensuring America's economic growth and national security. During the next decade, U.S. demand for scientists and engineers is expected to increase at four times the rate for all other occupations. Today's high school students overall are not performing well in math and science, and fewer of them are pursuing degrees in technical fields.
- Outreach and informal science education activities engage more than 35,000 SD residents per year.

Diversity


The SD EPSCoR diversity plan represents bold, catalytic, strategic and systemic approaches to recruiting and supporting citizens of all races, ethnicity, nationality, gender, age, economic status, and sexual orientation within STEM. With a small population, South Dakota must take advantage of all its human resources if it is to advance.

SD EPSCoR Diversity Goals and Strategies:

- Develop a mechanism for sharing successful diversity initiatives and discussing policies, progress and barriers statewide. The annual SD EPSCoR Diversity Summit will be a venue for sharing and linking promising, but currently disconnected diversity initiatives.
- Develop meaningful partnerships between state government, K-12, higher education and the private sector to strengthen STEM education for diverse audiences and to diversify STEM-related workforce. Utilizing statewide initiatives to improve instruction for underrepresented groups and those in remote regions as well as diversifying SD's STEM workforce.

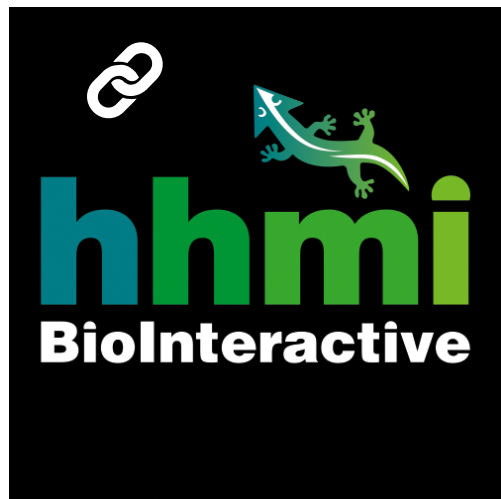
SD EPSCoR Education Portal

Submitted by Ali Bowers


The SD EPSCoR Education Portal contains curriculum units aligned science research in South Dakota. These units are written by South Dakota science teachers and are tied to a scientist's research topic and our standards. This summer was the second year of this project, so more curriculum modules were added in August. For example, "Mind if I Mine Here?" asks earth and space science students to evaluate the impact of a mining expansion permit proposal and develop a plan to monitor a reclamation plan. These are two great sources for lessons that are tied to real-life science and are three-dimensional. They incorporate the science and engineering practices, the crosscutting concepts, and the disciplinary core ideas for our science standards. Check out www.sdepescor.org/edportal today! 

HHMI - Spanish Resources

A selection of short films, animations, classroom materials, and interactive features are available in Spanish. Go to the resource pages to find links to view or download the Spanish materials. The Spanish versions are equivalent to the English versions.




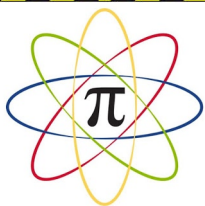
EnviroAtlas - EPA

EnviroAtlas interactive tools allow users to discover, analyze, and download data and maps related to ecosystem services, or the benefits people receive from nature. Ecosystem services underpin most aspects of human well-being, including water, security, and the economy. 



Walk Like a Hominin

A resource from HHMI - What makes humans different from our closest living relatives, chimpanzees and bonobos? Explore human evolution with this new [interactive](#), part of our Great Transitions series. Examine fossil evidence from human relatives, focusing on three traits – brain size, tool use, and bipedalism. 



Consider submitting a session proposal by October 31, 2018 for the

SD STEM Ed Conference

FEB. 7-9, 2019

**WARNING:
DUE DATES
ARE CLOSER
THAN THEY
APPEAR**

Leadership Position in NSTA - District IX Director

This is a 3 year position in which you will represent the three states in our district: Minnesota, North Dakota, and South Dakota. The main points of this position is to represent the district at NSTA and promote NSTA in your district. The district director acts as the bridge for communication between the teacher and the national organization.

The requirements are:

Yearly:

- Attend NSTA winter meeting in Washington D.C in mid to late February
- Attend Summer Congress in July in various locations
- Attend one NSTA regional conference (optimum being the location that is in or closest to our district)

And at least once during your three year tenure:

- Attend each of the state conferences

You do have a small budget to help pay for your expenses. You will be paying for travel, lodging, food, registration, ... for the all conferences from this budget (state, regional, and national). The meetings (winter and summer congress) do NOT come out of your budget. Your district is reimbursed by NSTA for your substitute teacher expenses.

A few things:

- Most of your expenses are out of pocket at the beginning and then you will be reimbursed.
- If you are a classroom teacher, you will miss school. It is very helpful to have a supportive administration and you are OK with being gone from your classroom.
- It is a very rewarding experience. You will meet, work with, and network with an amazing group of people through the state organizations, NSTA, and the different conferences.

If you have any questions or want more information about my experience please don't hesitate to contact me.

<http://www.nsta.org/about/governance/nominations.aspx>.

Thanks,

Brenda Walsh - District IX NSTA Director

bwalsh@edenpr.org

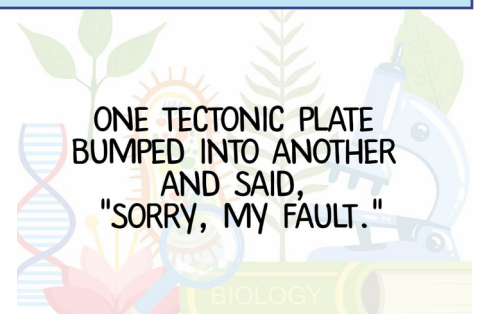


Google Science
Journal 

Science Journal is a free digital science notebook brought to you by Google. Whether you're a science educator or a hobbyist doing science at home, you can keep your notes, photos, and observations all in one place.

How do you organize a space party?.

.....You PLANET!



"The Goehring/Veitz Leadership Scholarship"

"The Goehring/Veitz Leadership Scholarship" has been established to encourage new teachers of math and science to become professionally involved on the state level. The scholarship, which is good for a free one or two day registration at the Joint Conference of the South Dakota Council of Teachers of Mathematics and the South Dakota Science Teachers Association, is available to any teacher who meets each of the following criteria:

- Is a K-12 teacher of math or science who is in the first year of teaching in SD
- Is a member of SDCTM and/or SDSTA Applicants must pay their own dues to the chosen organization.

The application process is simple. Fill out the form below, have it signed by the building principal, and mail it to Sheila McQuade, 3201 S Kiwanis, Sioux Falls, SD 5710, along with the regular conference registration form which is available at www.sdctm.org.

APPLICATION "GOEHRING/VEITZ LEADERSHIP SCHOLARSHIP"

Name: _____

School District: _____

Teaching Assignment: _____

Membership Information:

I am already a member of SDCTM SDSTA (Circle one or both)

I am joining SDCTM and/or SDSTA (Circle one or both)

I am enclosing a check for

\$5.00 for Elementary Math and/or \$5.00 for Elementary Science

\$20.00 for MS/HS Math and/or \$20.00 for MS/HS Science

(Name) _____ is in his/her first year of teaching in SD at
_____ School District during the _____ school
year and is thus eligible for "The Goehring/Veitz Leadership Scholarship."

Signed: _____, Building Principal

Presidential Awards for Excellence in Math and Science Teaching

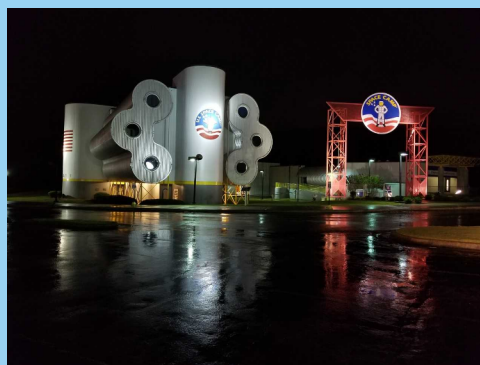
It is almost time for 2019 Presidential Award for Excellence in Mathematics and Science Teaching nominations! For the highest honor math and science educators can earn, this year we are looking for applications from 7-12 science and mathematics teachers. Please reach out if you have questions or would like some mentoring, as now is the time to begin planning a lesson. Our next SDSTA newsletter will contain more details regarding this prestigious award. Visit <https://www.paemst.org/> to sign up for an alert when the Fall 2018 nomination window is opened!



Space Academy and Air Camp

Submitted by Jen Fowler

Our South Middle School, in Rapid City, continued our summer tradition of sending students on amazing adventures! Our school has a benefactor that pays for five students to attend Space Academy in Huntsville, Alabama and four students to attend Air Camp in Dayton, Ohio each year. I escorted the students to Space Academy for the week-long camp, and Brenda Murphey, SDSTA Past-President, went with our students to Air Camp and was included in the group activities for the week. Check out these links if you have students that may be interested in attending on their own, or through fundraising. Air Camp: <https://aircampusa.com/> Space Camp: <https://www.spacecamp.com/> You may even have a benefactor in your town that may be willing to sponsor students.



OBTA AWARD

Please nominate a deserving teacher for the Outstanding Biology Teacher Award (can be a life science teacher grades 6-12).

As with most small schools, teachers have many different assignments so for this award, at least one of their assignments must be in the life sciences. They have to have taught and are currently teaching life science for three years or more. There are many deserving teachers out there that need to be recognized.

The award comes with a \$1000 award sponsored by Sanford Health and is to be used to attend the National Association of Biology Teachers annual national conference or for materials for their classroom. Angela Wachal was the 2018 awardee. Send an email with your name and email along with the nominee, their email and school to Julie Olson at julie.olson@k12.sd.us.



CAREER & TECHNICAL (CTE)

EDUCATION GRANTS

🎯 ABOUT CTE GRANTS

Proposals for SD EPSCoR funds through the Department of Education aim to increase the number of STEM graduates skilled in informatics and biosciences at all levels by partnering industry with K16 education and research activities to meet the growing workforce needs in South Dakota.

Applications may be submitted by school districts and educational service providers in South Dakota & must demonstrate partnerships with economic development corporations or industry partners.

School districts that receive funding will be expected to fulfill the requirements of approved CTE programs in South Dakota during the 2018-19 school year.

These opportunities can be accomplished through: Development of rigorous new programs; expanding or increasing rigor and relevance in current programs; enhancing career guidance; implementing capstone experiences; providing virtual courses, and more. Visit bit.ly/CTEGrants18 for more information.

🎯 SCOPE/TIMELINE

Up to \$170,000 will be granted to schools. Grant awards will cap at \$30,000 each. Projects may begin following award notification October 11, 2018. Funds must be expended by prior to April 15, 2019.

All proposals must be submitted electronically to Jane.Gubrud@state.sd.us by **5 pm CST, Thursday, September 27, 2018**. A copy with necessary signatures in blue ink shall be submitted to:

Kim Van Den Hemel
800 Governors Drive
Pierre, SD 57501-2291

* Applications must be postmarked by Thursday, September 27, 2018

Examining Changes to the Environment Through Pictures and Data

from Census.gov

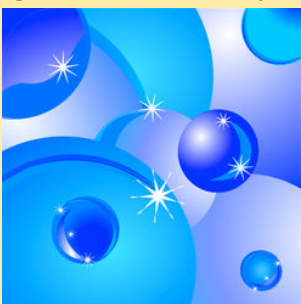


Students will examine how human actions and population changes can affect the environment. Students will examine a series of photographs that compare famous landmarks (Times Square, the Saltair Pavilion in Utah, Laguna Beach, and Niagara Falls) across time, and then they will identify human-generated changes in the physical environment, such as the addition of bridges and roads. Students will also examine U.S. Census Bureau population and housing data to see how population changes can contribute to changes in the physical environment. In addition, students will describe the impact of these changes on the environment.

Bubbles and the Plasma Membrane

Submitted by Lisa Cardillo

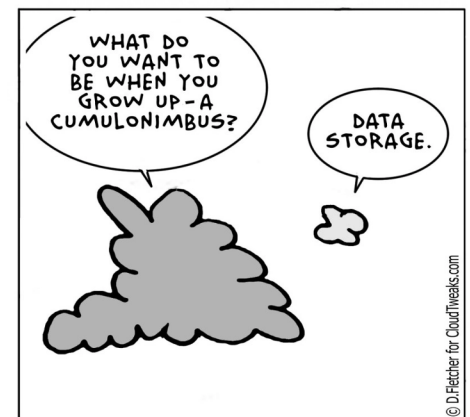
Looking for a great way to get students involved with Plasma Membranes? Bubbles make a great stand in for cell membranes. They're fluid, flexible, and can self-repair. Bubbles and cell membranes are alike because their parts are so similar. If you could zoom down on a cell membrane, you'd see that much of the membrane is a double layer of little molecules called phospholipids. Phospholipids have a love-hate relationship with water. One end, the "head," is attracted to water, and the other end, the "tail," is repelled by water. Place phospholipids in water and they quickly form a double layer with the heads facing out on both sides. A soap molecule has the same split personality. The "head" of a soap molecule is charged (ionic) and attracts to water molecules, which have regions of positive and negative charge (polar). The hydrocarbon tail of the soap molecule is not charged and is repelled by water's polarity. This explains why we use soap to clean. The hydrocarbon tail of soap mixes with and dissolves in other hydrocarbons, like oils and fats, while the head region grabs a hold of passing water molecules and follows them



down the drain. The surface of a bubble has three layers. The middle layer is a thin film of water. On both sides of this film is a layer of soap molecules with hydrophilic heads oriented toward the water film and hydrophobic tails pointing away.

NGSS POSTERS FROM VERNIER

Keep NGSS Cross-Cutting Concepts and Science & Engineering Practices in view with these exclusive posters from Vernier!





THE SANFORD PROMISE
Inspiring the next generation of scientists.

2018/2019 SCIENCE DISCOVERY DAY

FALL SESSION

November 6, 2018 • 8:30 a.m. –2 p.m.

SPRING SESSION

April 16, 2019 • 8:30 a.m. –2 p.m.

At Science Discovery Days, high school sophomores and juniors gain exposure to regional science and biomedical research careers.

Attendees will directly interact with practicing research professionals and regional post-secondary training programs at workshop sessions and exhibit booths, and are provided lunch and a PROMISE science t-shirt.

We invite students who question the science skills and training needed for careers in health research fields to join us for this unique, hands-on experience designed just for you.

SCHEDULE OF EVENTS

- 8:15-8:30 a.m.....Student Arrival/Registration
- 8:30-9:50 a.m.....Careers in STEM Keynote
- 10 a.m.-1:30 p.m. Workshop Sessions, Booth Exhibits, Guided Tours of Sanford and Lunch
- 1:30-2 p.m.....Close, Surveys and Raffle

LOCATION

Sanford Research Center, 2301 E. 60th Street North, Sioux Falls, SD 57104

TO REGISTER

Each event hosts up to 300 students. Please note schools are required to provide one adult chaperone (teacher, counselor, administrator, parent, etc.) for every 20 students.

Fall session: <https://www.surveymonkey.com/r/2018FallSDD>

Spring session: <https://www.surveymonkey.com/r/2019SpringSDD>

CONTACT US

sanfordoutreach@sanfordhealth.org • (605) 312-6590
 sanfordresearch.org/education



Sanford Research



@SanfordPROMISE



SANFORD
 RESEARCH

Critical Thinking and Pseudoscience

Submitted by Ali Bowers

One of my favorite beginning of the year mini-units is on pseudoscience. I teach my students word roots throughout the year, and the prefix pseudo- means “fake” or “false.” Based on that, my students figure out that we’ll be talking about fake science – things that sound like they have scientific evidence behind them, but really don’t.

To teach this unit, I typically find some current pseudoscience examples. This might include a new product marketed as a “miracle cure,” a weird new beauty trend, or anything from David Wolfe. (Check out David Wolfe on Facebook or Twitter if you want to see someone who is clearly lacking science literacy skills!) The latest example of this that I stumbled across was a relaxing beauty treatment gone wrong. A New Mexico spa offered a “vampire facial,” where aestheticians injected clients’ own plasma back into their faces, promising smooth, rejuvenated skin. During a state inspection at the spa, officials found problems with needle storage, handling, and disposal. Now, those clients are being encouraged to get tested for HIV, hepatitis B, and hepatitis C.

By tying in these relevant current events, I emphasize to my students the importance of evaluating information, especially information that seems too good to be true. Critical thinking skills help my students spot pseudoscience and not be fooled by tricky marketing, or worse, dangerous health misinformation.

PROJECT DRAGONFLY

Miami University’s Project Dragonfly is accepting applications for 2019 Earth Expeditions graduate courses that offer extraordinary experiences in 16 countries throughout the world.

http://EarthExpeditions.MiamiOH.edu/18-19_news



Earth Expeditions can build toward the Global Field Program (GFP), a master’s degree that combines summer field courses worldwide with web learning communities so that students can complete the GFP master’s part-time from anywhere in the United States or abroad.

http://GFP.MiamiOH.edu/18-19_news



Project Dragonfly also offers the Advanced Inquiry Program (AIP) master’s degree that combines web instruction from Miami University with experiential learning and field study through several AIP Master Institutions in the U.S. Applications for Miami’s 2019 cohorts are being accepted now with place-based experiences provided at zoos in Chicago, Cincinnati, Cleveland, Denver, New York, San Diego, Seattle, and St. Louis.

http://AIP.MiamiOH.edu/18-19_news



WIND FOR SCHOOLS

The South Dakota Wind for Schools team will conduct professional development on the topic of a wind energy and provide a hands on experience with our wind energy development kits. This is a no charge program to the local school districts and they will provide a program to teach educators on how to incorporate energy into the curriculum at their school. The first training program will be October 12 2018, at Lake Area Technical Institute, Room 936 in the Manufacturing, Energy, and Transportation (MET) Building, 1201 Arrow Ave, Watertown, SD 57201. The hours of the educator training are 8:30 am CDT to 3:00 pm CDT.

RSVP by October 1, 2018 sent to wind@pie.midco.net or if you have any question please call Steve at 605 295-1221.



What Is the Asteroid Belt?

By Jane Houston Jones and Jessica Stoller-Conrad

Feeling like you missed out on planning a last vacation of summer? Don't worry—you can still take a late summertime road trip along the Milky Way!

The waning days of summer are upon us, and that means the Sun is setting earlier now. These earlier sunsets reveal a starry sky bisected by the Milky Way. Want to see this view of our home galaxy? Head out to your favorite dark sky getaway or to the darkest city park or urban open space you can find.

While you're out there waiting for a peek at the Milky Way, you'll also have a great view of the planets in our solar system. Keep an eye out right after sunset and you can catch a look at Venus. If you have binoculars or a telescope, you'll see Venus's phase change dramatically during September—from nearly half phase to a larger, thinner crescent.

Jupiter, Saturn and reddish Mars are next in the sky, as they continue their brilliant appearances this month. To see them, look southwest after sunset. If you're in a dark sky and you look above and below Saturn, you can't miss the summer Milky Way spanning the sky from southwest to northeast.

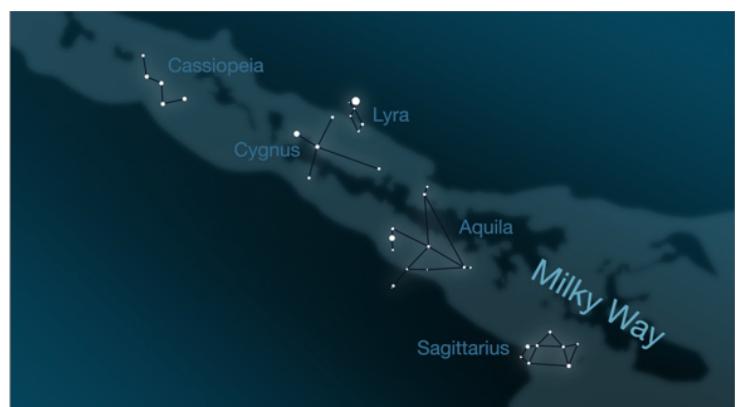
You can also use the summer constellations to help you trace a path across the Milky Way. For example, there's Sagittarius, where stars and some brighter clumps appear as steam from a teapot. Then there is Aquila, where the Eagle's bright Star Altair combined with Cygnus's Deneb and Lyra's Vega mark what's called the "summer triangle." The familiar W-shaped constellation Cassiopeia completes the constellation trail through the summer Milky Way. Binoculars will reveal double stars, clusters and nebulae all along the Milky Way. Between Sept. 12 and 20, watch the Moon pass from near Venus, above Jupiter, to the left of Saturn and finally above Mars!

This month, both Neptune and brighter Uranus can also be spotted with some help from a telescope. To see them, look in the southeastern sky at 1 a.m. or later. If you stay awake, you can also find Mercury just above Earth's eastern horizon shortly before sunrise. Use the Moon as a guide on Sept. 7 and 8.

Although there are no major meteor showers in September, cometary dust appears in another late summer sight, the morning zodiacal light. Zodiacal light looks like a cone of soft light in the night sky. It is produced when sunlight is scattered by dust in our solar system. Try looking for it in the east right before sunrise on the moonless mornings of Sept. 8 through Sept 23.

You can catch up on all of NASA's current—and future—missions at www.nasa.gov

For more information about asteroids, visit: <https://spaceplace.nasa.gov/asteroid>



This illustration shows how the summer constellations trace a path across the Milky Way. To get the best views, head out to the darkest sky you can find. Credit: NASA/JPL-Caltech

*This article is provided by **NASA Space Place**. With articles, activities, crafts, games, and lesson plans, NASA Space Place encourages everyone to get excited about science and technology. Visit spaceplace.nasa.gov to explore space and Earth science!*

World of 7 Billion Video Contest

In the fall of 2011, world population surpassed 7 billion and as a citizen of the earth, it's important to understand how we reached this milestone, analyze the impact of our choices, and realize that our decisions can and will impact the future. Create a short video – up to 60 seconds – about human population growth that highlights one of the following global challenges: Preserving Biodiversity, Sustainable Resource Use, or Protecting Human Rights. All videos must include:

- ▶ how population growth impacts the issue
- ▶ at least one idea for a sustainable solution.

Possible sub-themes include:

- **Preserving Biodiversity** – Habitat destruction/ fragmentation, ecosystem diversity, coral reefs, deforestation, pollinators, extinction, invasive species
- **Sustainable Resource Use** – Energy, fossil fuel use, single-use products, diet, overfishing, global inequities in consumption
- **Protecting Human Rights** – Poverty, barriers to education, women and girls, forced migration, environmental/social justice, economic security

Deadline for submissions is
February 28, 2019.



Carton 2 Garden Contest

After four fantastic years, Evergreen Packaging has decided to end the Made by Milk contest and consolidate its school programs. That means Made by Milk's sister contest, Carton 2 Garden, is growing to make space for your creative entries! In addition to the opportunities for STEM, environmental, and health & nutrition prizes, Evergreen is adding a Carton Art in the Garden category. This will be one of the specialty awards, and part of the grand prize consideration. They have also shifted the timing of the contest so it starts now, and prizes will be awarded in April. For the 2019-2019 program, Carton 2 Garden will award fifteen prizes, including a \$5,000 grand prize. Not sure if this is for you? Check out Carton 2 Garden to find some great inspiration from previous contest winners and how the program works. Go to the Carton 2 Garden Registration Page to receive exclusive lesson plans for maximizing your classroom experience, and receive tips and reminders from their friends at KidsGardening – the leaders in the school garden movement since 1982. Don't overlook this opportunity to support a creative garden project by re-purposing cartons at your school!



Project Green Challenge - 2018

Who: YOU! Students from all 50 states and over 35 countries join together to change the world!

What: A 30-day **global challenge** for high school and college students that informs, inspires & mobilizes students to work toward a **greener lifestyle** and **healthier planet**

When: Starting **Monday, October 1** through **October 30**

Where: [Sign up at projectgreenchallenge.com](http://projectgreenchallenge.com)



Why: To be the change you want to see in the world and win a fabulous **\$10,000 grand prize** including a trip to San Francisco for the **PGC 2018 Finals**

How: Log in **October 1** to start your eco-journey

- Each day in October focuses on a **unique sustainability theme** and offers up to four levels of challenges
- Up to **20 great prize packages** are **awarded daily** to participants who upload outstanding challenge submissions.

Opportunity to win a **Grand Prize Package** valued at \$10,000+, including a **\$5,000 Green Award** for education or advocacy and an **all-expense paid trip to San Francisco** for an extraordinary 4-day **PGC Finals Eco Summit** (up to 16 students)



SD-AAPT High School Photo Contest — Rules and Entry Agreement

(this page must be returned with submission)

Rules

- Photos must be unmounted, 8" x 10" or 8.5" x 11", and may be either black-and-white or color. Traditional photos must be submitted on photographic stock. Photos taken with a digital camera must be submitted as a high-quality print on photo stock and be trimmed to 8" x 10" or 8.5" x 11".
- **If photos are taken with a digital camera:** an unmodified electronic file must accompany the submission. *(Small adjustments to brightness, ... is acceptable.)*
- Computers shall not be used to modify or enhance photos.
- Only one photo per student. *(Multiple small photos on one 8.5" x 11" sheet are not allowed.)* Only one student per entry. *(Photo cannot be taken by two or more people.)*
- The student must take the photo.
- The submission must include the following information both in hard copy and on a computer media format CD or submitted via email (PC format: MS Word):
 - Student's name, complete home mailing address and email address;
 - Student's high school & complete school address;
 - School phone number;
 - Teacher's name and email address;
 - Specify "Natural" or "Contrived" category entry;
 - Essay of 250 words or less describing the physics in the photo. The essay should have a title and must be written by the student. *(Hand-written submissions are not acceptable and will be disqualified.)*

We cannot mail prizes if we do not have complete mailing addresses. Email and phone numbers may be used to contact you with questions, but will not be sold or otherwise used for marketing purposes.

Entrant grants SD-AAPT permission to post their submission on the SD-AAPT website, or to use it in SD-AAPT publications or marketing materials. Submissions will not be returned. Any submission which does not meet the above criteria will not be considered.

I have read the above rules and agree to all terms and conditions. I understand that if I omit or falsify information, or if I do not sign this form, I will not be eligible for this contest.

Student signature

Date

Home address

Student email address

Student's High School

H. S. Address

School Phone Number

Teacher's name & email

Is your photo (Circle one) "Natural" or "Contrived"

Send entry to: James Stearns James@SDSTA.org
15 North Fifth Street
Groton, SD 57445-2024

Exhibitor Registration Is Open for the 27th Annual SD STEM Ed Conference!

Deadline for getting Exhibitor information into our conference booklet is Dec. 15th. Late sign-ups are welcome but Exhibitor information will not make it into conference booklet.

Do you know companies or organizations who may be interested in hosting an exhibit booth at the SD STEM Ed Conference? Please share their organization name and contact information with vendor@sdsta.org.



Build Your Own AlkaSeltzer Rocker and Win \$2000 – sponsored by Scientific American

Building your own rockets is fun. Building them for a cash prize is even better. Are you ready to compete to build a rocket powered only by effervescent tablets? If you've ever dreamed of building a rocket and launching it skyward, dream no more! Maybe just dream a little smaller.

This summer, Scientific American Custom Media and their partners at Bayer are hosting the *BUILD-YOUR-OWN ALKA-ROCKET CONTEST* for backyard craft powered by water and effervescent tablets. The winner will become a legend overnight—and walk away with a \$2,000 prize. So dust off your sketchbook, pick up some effervescent tablets and get busy building. History awaits.

Entry: Going for the prize is easy. Build an Alka-Rocket and send it skyward with fuel made only of effervescent tablets and water. And capture it all in a video, which you share over social media with the **#alkarocketchallenge**.

So they can keep track, please also email the links to your social media posts to **alkarocket@sciam.com**. Please note, any entrant under the age of 18 also needs to email us a signed **parental consent form** when they or their team sends us the links to social posts. **Judging Criteria:** *The BUILD-YOUR-OWN ROCKET CONTEST* is completely subjective. The panel of judges at Scientific American Custom Media and our partners at Bayer, which hosts the annual *Alka-Rocket Challenge* for university students, will award a winner and two runners up on the basis of creativity of rocket design, launch and video submission.

Design: Is it awesome? Will it turn heads at your Labor Day picnic or Sunday BBQ? Well, then you're getting close.

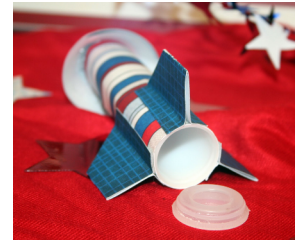
Launch: Rockets fly. If yours does not, that doesn't say much for your shot at the prize. Also, where and how you launch can be just as important as the launch itself.

Editing & Graphics: A great launch recorded in a not-so-great video is going to struggle in the judging competition. Have fun with your submission; get creative; and show off who you are, why you've entered and why you deserve to win.

Eligibility: Competitors must reside in the U.S. and be age 8 or older.

Enter by October 1, 2018.

<https://www.scientificamerican.com/custom-media/alka-rocket-contest/>



FULBRIGHT-JAPAN ESD

The Japan-U.S. Teacher Exchange Program for Education for Sustainable Development (ESD) provides U.S. teachers and administrators with a fully-funded opportunity to travel to Japan to learn about ESD efforts and strengthen ESD curricula in both countries. ESD is "a vision of education that seeks to balance human and economic well-being with cultural traditions and respect for the earth's natural resources," according to the United Nations Educational, Scientific, and Cultural Organization (UNESCO).

The Japan-U.S. Teacher Exchange Program for ESD is designed to raise awareness of ESD-oriented school programs, enhance ESD-related curricula in both countries, and deepen a sense of global interconnectedness between teachers in Japan and the United States.

Teachers from Japan will travel to the U.S. in late April, and teachers from the U.S. will travel to Japan in late June. At the end of the program in each country, teachers will gather for a few days of joint collaboration.



SD Science Olympiad

Clark Bennett would like to extend an invitation to you, to your students, and to your school to participate in the 2019 South Dakota Science Olympiad State Tournament on Saturday, March 23, 2019 at The University of South Dakota in Vermillion.

The registration deadline for the state tournament is Friday, January 11, 2019. As soon as your registration and payment is received, Clark will email you the information about how to obtain the PDFs for the Division B and/or C rules manuals from the National Science Olympiad website.

For the participating schools, the deadline for emailing the school's preliminary lists of participating students and their events to Clark is Friday, February 15, 2019. Some important initial documents such as: the fall invitation letter for 2018-2019 and the state tournament membership/registration form for 2018-2019 can be found as PDF files on the South Dakota Science Olympiad website. Please feel free to download/print them. If you need a copy of the fall invitation letter and the state tournament membership/registration form as either PDF files or as Microsoft Word documents, then please let Clark know. Also, please make sure to look at the South Dakota Science Olympiad policies on home school teams, small school teams, all-star teams, and constructed devices on the main page of the website (<http://sites.usd.edu/sdscienceolympiad/home>). These policies get updated from time to time. There is a list of 2019 Science Olympiad events on the membership/registration form.

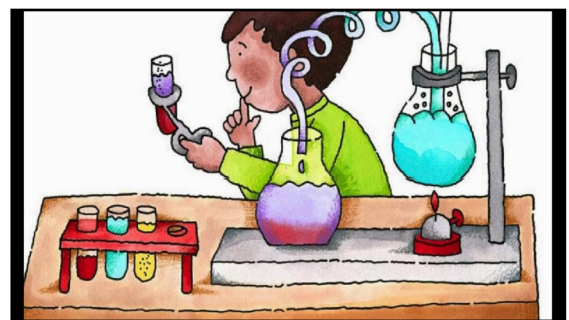


Understanding How Science Works

Useful for those participating in student scientific research

Understanding Science and Howard Hughes Medical Institute BioInteractive are pleased to announce the new [How Science Works web interactive](#). This free journaling tool allows students and scientists to document, annotate, and reflect upon their own and others' scientific research process. Students can map paths through the process of science on the Understanding Science flowchart, create journals with notes and photos, save files to share and edit later, and export PowerPoints for presentations and assignments. Use this tool alongside any inquiry-based science activity or Understanding Science lessons such as [Exploring Bouncing Balls](#) and [Designing Your Very Own Science Experiment](#).

Kick off the school year right by getting students started with the [How Science Works web interactive](#)!



 **How Science Works**



Consider submitting a session proposal by **October 31, 2018 for the 27th Annual Joint Conference.**

SD STEM Ed Conference

FEB. 7-9, 2019





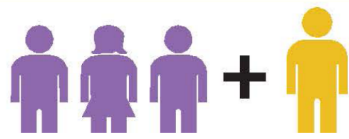
CYBERMISSION

ACCEPT THE CHALLENGE

Web-Based STEM Competition

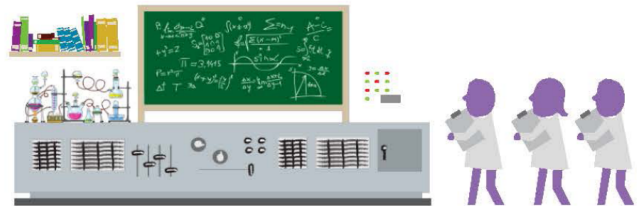
Free Registration

AUG – DEC
TEAM REGISTRATION



Teams of 3 or 4 students in 6th through 9th grade plus an adult Team Advisor

AUG – FEB
TEAMS CONDUCT RESEARCH AND EXPERIMENTS



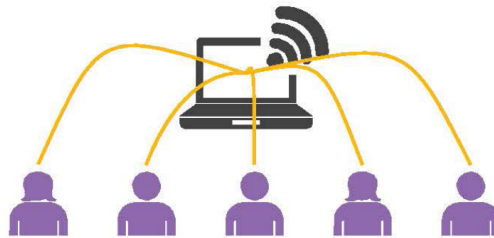
47% OF THE NATION'S 8TH GRADERS REPORT THAT THEY "NEVER OR HARDLY EVER" WRITE REPORTS ABOUT SCIENCE PROJECTS.

- National Science Foundation's 2012 Science and Engineering Indicators

DEC – FEB
MISSION FOLDER SUBMISSION



MARCH
VIRTUAL JUDGING



39% OF THE NATION'S 8TH GRADERS REPORT THAT THEY "NEVER OR HARDLY EVER" DESIGN A SCIENCE EXPERIMENT.

- National Science Foundation's 2012 Science and Engineering Indicators

APRIL
REGIONAL JUDGING



Late APR
STATE WINNERS ANNOUNCED

MAY
NATIONAL FINALISTS ANNOUNCED



JUNE
NATIONAL JUDGING & EDUCATIONAL EVENT



eCYBERMISSION is a web-based STEM competition for students in grades six through nine that promotes self-discovery. Teams of three to four students, guided by a Team Advisor, ask questions (for science) or define problems (for engineering), and then construct explanations (for science) or design solutions (for engineering) based on identified problems in their community. Students compete for State, Regional, and National awards.

Win up to **\$9,000** (maturity value) in U.S. Savings Bonds

Program Contact Information:

E: missioncontrol@ecybermission.com | Tel: 1-866-GO-CYBER (462-9237)

Web: www.ecybermission.com | www.usaeop.com

Administered by



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Upcoming DATES

October 31

Session Proposal

December 1

Confirmation of Proposal Acceptance

December 15

Exhibitor Information into Booklet

January 20

Advanced, mail-in registrations

January 22

Advanced, on-line registrations

**February 7-8 & 9, 2019 SD STEM Ed Conference
Huron, SD**

The SDSTA Newsletter is published four times a year. The June issue (this one) is e-mailed to 105 paid members and several school science departments. The Membership year in SDSTA starts with the February conference and ends the thirty-first of January. Dues are due at each conference for member discount rates. SDSTA members may give a one year free membership to their student teachers by submitting the student teacher's name & address. One paid conference registration may be given to the SDSTA member that has made a submission to the newsletter (or given a presentation at the conference) and has referred at least three new members. Members may also earn a 10% finder's fee for any science related ads placed in the newsletter. Our rates are \$50 per page (or 3 to 4 quarter pages).



Become a Member!

\$5 Student, K-6, Retired **\$20** All Others

Name _____ Home Phone _____

Home Address _____ E-mail _____

City _____ State _____ Zip _____

Your School _____ School Phone _____

School Address _____

Your area (circle one) K-6 7-8 9-12 College Other _____

Referred by _____

Mail to:

James Stearns, SDSTA Treasurer
15 North Fifth Street
Groton, SD 57445-2024