



ASTA Mission Statement

To inspire, promote and support excellence in science education

In this issue:

- News of the October State Math –Science Conference
- Information from the SySTEMic Newsletter about Science Opportunities
- ASTA Promotion Flyer to post in your building
- Emma Walton Award Nomination Forms
- Mini-Grant Application Forms
- Alaska Environment Literacy Plan

CHECK OUT THESE WEBSITES:

Incredible Image of the Sun

http://www.nasa.gov/images/content/719590main_Grid-Sun-orig_full.jpg

Alaska Science & Engineering Fair

<http://alaskasciencefair.org>

National Ocean Sciences Bowl

<http://seagrant.uaf.edu/nosb/whatis.html#national>

Adopt a Drifter

<http://www.adp.noaa.gov/index.html>

Minute Physics

<http://www.youtube.com/user/minutephysics>

Nature Works Everywhere

<http://www.natureworkseverywhere.org>

Science Olympiad

<http://www.alaskascienceolympiad.org>

2013 Alaska Math Science Conference

Save the Date!!

Planning is in full swing for the 2013 Alaska Math-Science Conference, which will be in Anchorage this time. The conference, co-sponsored by the ASTA and the Alaska Council of Teachers of Mathematics (ACTM), provides professional development for Alaska's science and math teachers. The conference will start on Friday, October 18, 2013 and will run through Sunday, October 20, 2013.

The conference website is near completion and will have links to accommodation reservations, program information. We will send links to ASTA members once the website is ready.

Of course, we still need help. Email us for more details or to sign up on a committee!

Cynde Hill (hill_cynde@asdk12.org)

Judy Onslow (jjonslow@gmail.com)

From the SySTEMic newsletter:

NEON - NASA Educators Online Network- WEBINARS Information and Dates

AESP Webinar Series - CLICK HERE .

<http://neon.psu.edu/webinars/>

Next installments coming January 22nd, 28th and 30th.

Join our specialists for webinars highlighting NASA Resources

that you can use in your education activities.

****On January 22nd (4-5PM & 6-7PM Eastern),**

Tony Leavitt will discuss a hands-on, critical thinking and collaborative

approach to studying images and interpreting the

geologic processes of Mars through the inquiry lessons in "Mars

Image Analysis."

****On January 28th (4-5PM & 6-7PM Eastern),**

Steve Culivan will discuss NASA inquiry activities and

missions that demonstrate remote sensing and scale

models to better visualize our sun, planets, asteroids

and other objects as a true system (our solar system).

****On January 30th (3-4PM Eastern)**, Susan Kohler will discuss global climate change using imagery and data from NASA satellites, plus she will demonstrate a classroom activity that builds a satellite using simple materials.

Click here to join the conversation (log on as a "Guest").

EARTH SCIENCE Week Update - January 2013 Study Plate Tectonics Rock Cycle Online

The Geological Society of London (GSL), an international Earth Science Week partner, offers two new online resources for learning about key geoscience topics. Reinforcing the "Mapping Our World" theme of Earth Science Week 2013, electronic map-based resources are the focus of GSL's "Plate Tectonics" page (<http://www.geol Soc.org.uk/Plate-Tectonics>).

In addition, a new site is being launched to accompany GSL's "Rock Cycle" online module (<http://www.geol Soc.org.uk/rockcycle>). Founded in 1807, GSL is the oldest geological society in the world. Learn more about GSL, the United Kingdom's national society for geoscience, online (<http://www.geol Soc.org.uk/education>).

The Saturday Thing - Tinkering Gone Wild

I am doing a day-long workshop at the upcoming ASTE conference in Anchorage on 2/23. It is called The Saturday Thing-Tinkering Gone Wild and is based on my program in Juneau to introduce tinkering to kids as a way to get them interested in engineering and technology. I am trying to interest other communities to get involved. I stress that this is a drop-in workshop. The link to the ASTE description is <https://docs.google.com/a/jedc.org/spreadsheet/ccc?key=0ApcAE0vfiNpdFhDTEMzUS1SRjg0ajVnb0piTEhtNFE#gid=0>.

GSA Geoscientists Reach Out to Educators

Teachers and students alike can learn a lot from the Geological Society of America (GSA), an AGI member society and Earth Science Week partner. GSA is an organization of geoscientists in industry, government, business, and academia who are committed to the ongoing professional growth of Earth scientists. One of GSA's major education and outreach programs, the Teacher Advocate Program (TAP), provides "Explore Geoscience" CD-ROMs, lesson plans, educational materials, and resource links for Earth science teachers. For more information

on TAP, visit

<http://www.geosociety.org/educate/tap.htm>. Teachers also can take advantage of GSA's Teacher GeoVenture trips, teacher workshops, and Distinguished Earth Science Teacher in Residence. GSA also offers a number of teacher awards and fellowships. See <http://www.geosociety.org/awards/aboutAwards.htm> to learn more. Students are encouraged to apply for GSA's GeoCorps America program, which works with the National Park Service, the Forest Service, and the Bureau of Land Management to place young geoscientists in geoscience-related positions at national parks. Find out more at http://rock.geosociety.org/g_corps/index.htm.

Engineering is Elementary Workshops

JEDC/STEM AK has received a grant from the AK Department of Labor (and administered by the AK Workforce Investment Board) to hold workshops for 60 teachers statewide in the Engineering is Elementary program. The Engineering is Elementary (EiE) project, developed by the Museum of Science Boston, fosters engineering and technological literacy among elementary school students and educators. EiE has created a research-based, standards-driven, and classroom-tested curriculum that integrates engineering and technology concepts and skills with elementary science topics. EiE lessons not only promote science, technology, engineering, and mathematics (STEM) learning in grades 2-5, but also connect with literacy and social studies. The one-day workshops, including all training materials and classroom implementation kits, are free to schools and districts. A distance delivery option will also be available beginning in April. More information can be found at <http://stemak.org/engineering-elementary>. To schedule a workshop or get answers, contact Bob Vieth, 907-523-2342, rvieth@jedc.org<<mailto:rvieth@jedc.org>>

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Spread the Word...

Share **ASTA** with your colleagues by posting this flyer in your school!



**Do you teach
Science here in
Alaska?**
Join the Alaska Science
Teachers Association, your
statewide professional
organization.

Here are a few of the many reasons professionals participate in ASTA:

#1 Science News and Opportunities! Members of ASTA can stay “in the know” about science opportunities such as awards, camps, programs, or internships for you and your students by reading our newsletter and website. Read about new ways to teach or get sample lesson plans from our website to ignite your science pedagogy.

#2 Conferences! As a member you are able to take advantage of professional development offered through national and statewide conferences where workshops, resources, speakers, and field trips broaden your knowledge and address many of your interests.

#3 Network! Association with other professionals who have similar interests and a wide variety of experiences, gives you opportunities to share your expertise and learn from others. This networking is so valuable!

#4 Involvement and Leadership! Being a member means you can give back to the profession, by getting involved. There are many opportunities to actively participate in events, committees, conferences, and board positions.

#5 Grants! Members are eligible to apply for grants to help with classroom equipment or project costs, or for conference travel grants.

#6 Help other teachers! You can choose to lead a conference workshop, or help your school and district colleagues learn more about science and the teaching of science..

ASTA Mission Statement

To inspire, promote and support excellence in science education.

Our goals advocate science literacy for all Alaskans; promote the exchange of information about science and science education among researchers, scientists, institutions, public leaders and science teachers; encourage the development of a skilled and knowledgeable work force in science related careers.

JOIN TODAY BY LOGGING ONTO <http://www.aksta.org/membership.html>.



ASTA Mini-Grant Application for Classroom Project
Deadline –March 15, 2013

Mini-grants are awarded to ASTA members on a semi-annual basis. Applications will only be considered if they are post marked or e-mailed by the due date. This application is for a project mini-grant.

Title of Proposed Project _____
Teacher Name _____ **School** _____
Address _____
Phone _____ **email:** _____
Amount Requested (\$500.00 maximum) _____

**If awarded a project grant, an article about your project to be published in the next ASTA Newsletter AND receipts need to be submitted to the ASTA Treasurer by September 15, 2013 in order to receive the grant funds.*

**Must be an Alaska resident in addition to being a member of ASTA.*

You may use one additional page to complete the following questions.

Project Description

1. Briefly describe your proposed project. Include in the description project goals, the number of students involved, the Alaska Science Standards that are addressed, and proposed activities. **(5)**

2. Timeline for completion of your project. **(5)**

3. How will you evaluate the effectiveness of your project? **(5)**

Proposed Budget (5)

Budget Amount	Activity
Total	

Mail (postmark date on or before March 15, 2013) or e-mail the completed form to pbrown@hbsd.net no later than March 15, 2013. Forms can be mailed to Patty Brown, P.O. Box 984, Haines, AK 99827

I assert that these plans I am presenting are as accurate as I can make them and that I intend to make every effort to complete this project.

Signature of Applicant

Date

Scoring Guide for Classroom Project Mini-Grant Proposal

	Project Description	Timeline	Evaluation	Budget
5	<ul style="list-style-type: none"> ∞ Project description is complete, concise and includes all required elements (project goals, # of students involved, Standards addressed, proposed activities) ∞ Project activities involve active science learning for all students ∞ Project goals clearly promote scientific inquiry 	<ul style="list-style-type: none"> ∞ Timeline is realistic ∞ Goals are achievable in allotted time 	<ul style="list-style-type: none"> ∞ Evaluation plan is clear and well thought out ∞ Plan clearly evaluates effectiveness of project 	<ul style="list-style-type: none"> ∞ Budget is clear ∞ All expenditures are directly related to project activities
3	<ul style="list-style-type: none"> ∞ Project description is clear, includes all required elements ∞ Project activities may involve some active science learning for all students ∞ Project goals promote scientific inquiry 	<ul style="list-style-type: none"> ∞ Timeline is realistic ∞ Goals may be achieved in allotted time 	<ul style="list-style-type: none"> ∞ Evaluation plan is clear ∞ Plan attempts to evaluate effectiveness of project 	<ul style="list-style-type: none"> ∞ Budget is clear ∞ Most expenditures are directly related to project activities
1	<ul style="list-style-type: none"> ∞ Project description is unclear, may be missing required elements ∞ Project activities don't involve active science learning for all students ∞ Project goals don't promote scientific inquiry 	<ul style="list-style-type: none"> ∞ Timeline unrealistic ∞ Goals not achievable in allotted time 	<ul style="list-style-type: none"> ∞ Evaluation plan is not clear ∞ Plan does not evaluate effectiveness of project 	<ul style="list-style-type: none"> ∞ Budget is not clear ∞ Expenditures are not related to project activities

THE EMMA WALTON DISTINGUISHED SERVICE AWARD

Presented by the Alaska Science Teachers Association

GUIDELINES

The Alaska Science Teachers Association annually awards one citation for distinguished service in the field of science education. ASTA members are invited to share in the selection process by sending nominations of Alaska educators to ASTA for review by the Awards and Recognition Committee. This year the nominations open on January 15, 2013.

The award is designed to recognize Alaska educators who have made extraordinary contributions to the advancement of science education. Each award consists of up to \$500 to travel to the biannual Alaska Math/Science Conference, where a formal citation and a suitable token of appreciation for the outstanding service rendered by the recipient will be given.*

Dr. Emma Walton passed away in September 2012. She leaves a legacy of over forty years of teaching and education leadership in Alaska and on the national level. People who have met and worked with her over the years have admired her energy, motivating spirit, and unflagging commitment to the improvement of science and education. This award is granted to celebrate Emma's work as well as the effect of this spirit burning brightly in others.

ASTA Awards and Recognitions Criteria

Excellence of contribution to science education in Alaska is the main criterion for selection of the recipients. Among the types of outstanding services that are considered by the committee are:

- (1) Unique or extraordinary accomplishments in science teaching
- (2) Active leadership in science and/or science education.
 - _____ Local level
 - _____ State level
 - _____ National level
- (3) Noteworthy scholarly contributions to science education at any level.
- (4) Focusing of public attention and the need for improvement and better support of science education.
- (5) Direct and substantial contributions to the improvement of science education at any level.
- (6) Contributions over a significant period of time.
- (7) Overall excellence of contributions.

*If the conference is in the recipient's city of residence and travel expenses will be negligible, the \$500 may be spent for some other professional purpose. The 2013 Alaska Math and Science Conference is in Anchorage.

SEND APPLICATION PACKET TO:

Patty Brown
 Alaska Science Teachers Association, President
 P.O. Box 984
 Haines, AK 99827 ATTN: ASTA Distinguished Service Award

For the 2013 award, this packet should be received no later than July 1, 2013. The winner of the Distinguished Teaching Award will be notified by August 15, 2013.



Dear Advisors to the Alaska Environmental Literacy Plan,

Thank you again for your tireless efforts spreading the word about the draft AKELP plan! We have received very constructive feedback and have extended the comment period until February 15th 2013 to try and maximize feedback. At this point, we have two further requests of you:

1. If you have not done so already, please consider sending in a letter of support for AKELP either from yourself or your organization. When Kristen and I take the plan before the State Board of Education, we'd love to be able to tell them we have more than 100 letters of support for AKELP. Right now, we have 12.
2. Please continue to spread the word about AKELP with those in your communities. The more discussion we can generate around the plan the better. So please talk to your local schools, businesses, legislators, and tribal councils. If you would like hard copies of the draft plan to distribute, please let us know. We can mail them to you. However, people seem to be most interested in reviewing it electronically. Here's the link:
[:http://eed.alaska.gov/tls/akelp/](http://eed.alaska.gov/tls/akelp/)

As always, if you have any questions or thoughts, please feel free to contact myself (bjorn.wolter@alaska.gov) or Kristen (kristen.romanoff@alaska.gov).

Thank you! Enjoy the holidays.

Bjorn & Kristen

Bjørn Wolter, PhD

State Science Specialist

Alaska Department of Education & Early Development

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**ASTA Mini-Grant Application for Professional Development Travel
Due March 15, 2013**

Mini-grants are awarded to ASTA members on a semi-annual basis. Applications will only be considered if they are post marked or e-mailed by the due date.

**If awarded a travel grant, receipts need to be submitted to the ASTA Treasurer within 45 days after the professional development, in order to receive the grant money.*

**Must be an Alaska resident in addition to being an ASTA member.*

**If awarded a grant, please submit an article to be published in the following ASTA Newsletter.*

This application is for a professional development travel mini-grant.

**Name of the Professional Development Conference or Seminar
National Science Teachers Association (NSTA)**

Teacher Name _____ School _____
Address _____
Phone _____ E-mail: _____
Amount Requested (\$500.00 maximum) _____

You may use additional pages to complete the following questions.

Professional Development Conference or Seminar Description

3. Briefly describe the professional development conference, seminar, or other experience you are planning on attending. Include in the description conference or seminar goals, the proposed activities and, briefly, the Alaska Science Standards or Next Generation Science Standards that will be addressed. (5)

Standards addressed:

4. What are your personal goals for attending this conference or seminar? How will you share the information that you receive with your fellow professionals and your students (5).
5. Proposed timeline including the dates of the seminar or conference and presentations of information gained at the seminar or conference.

Proposed Budget (5)

Budget Amount	Activity
Total	

Expenditures are reimbursed from receipts mailed to the ASTA Treasurer following the documented attendance at the seminar or conference.

Scoring Guide for Seminar / Conference TRAVEL - Mini-Grant Proposal

	Project Description	Timeline	Personal Goals/Use of Information	Budget
5	<ul style="list-style-type: none"> ∞ Description of the seminar or conference is complete, concise and includes all required elements (project goals, # of students involved, Standards addressed, proposed activities) ∞ Seminar/conference information involves active science learning for a broad range of students and professionals 	<ul style="list-style-type: none"> ∞ Timeline is realistic ∞ Goals are achievable in allotted time 	<ul style="list-style-type: none"> ∞ Personal goals are well defined ∞ A plan to share information is well defined and thoroughly described 	<ul style="list-style-type: none"> ∞ Budget is clear ∞ All expenditures are directly related to attendance at conference or seminar
3	<ul style="list-style-type: none"> ∞ Description of the seminar or conference is clear, includes all required elements ∞ Seminar/Conference information involves some active science learning for some students and professionals 	<ul style="list-style-type: none"> ∞ Timeline is realistic ∞ Goals may be achieved in allotted time 	<ul style="list-style-type: none"> ∞ Personal goals are clear ∞ A plan to share information is minimally described 	<ul style="list-style-type: none"> ∞ Budget is clear ∞ Most expenditures are directly related to attendance at conference or seminar
1	<ul style="list-style-type: none"> ∞ Description of the seminar is unclear, may be missing required elements ∞ Seminar/conference information does not involve active science learning for students and professionals 	<ul style="list-style-type: none"> ∞ Timeline unrealistic ∞ Goals not achievable in allotted time 	<ul style="list-style-type: none"> ∞ A plan to share information is not well defined or thoroughly described ∞ A plan to share information is not well defined 	<ul style="list-style-type: none"> ∞ Budget is not clear ∞ Expenditures are not related to attendance at conference or seminar