Rural Educator Network Newsletter

Connecting Educators and Sharing Resources

NASA SciAct

NAU NORTHERN ARIZONA UNIVERSITY

Hello Educators!

This Newsletter is dedicated to providing:

1. NASA resources modified to the needs of rural audiences
2. Upcoming NASA events, webinars, and opportunities
3. Partnership highlights
4. Expressing your current needs and successes

You're invited to contribute content to a future newsletter...

Tell us a story, share an activity, photo, lesson plan, or resource.

Share with Us!

Help to Grow the Network: Share this sign-up link with friends: http://eepurl.com/h1xxQ9

Update Your Information

Please fill out this brief form to update your contact and profile information. Thank you!

Update Contact Info

Upcoming Events and Opportunities

Global Precipitation Measurement (GPM) Mission Webinar Series

As we celebrate the 10th anniversary of Global Precipitation Measurement (GPM) mission's launch, we have a real treat for anyone who is curious about how and why we measure precipitation from space and how this can bring about positive changes throughout the world- a free series of 10 public webinars exploring GPM and the story behind the mission. All events are at 8pm Eastern.

The next GPM Mission Webinar is about data on August 1, 2024 at 8:00 PM EST.

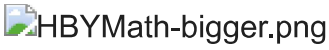
Every second of every day, NASA satellites are collecting data to help us better understand and protect our home planet. Have you ever wondered what kinds of data NASA collects and how you can access it? Join us and find out how and why we use Earth-observing satellites to collect data, where you can access this free and openly sourced data, and how various NASA-sponsored programs are helping make data understandable and accessible to everyone.

Register Here

Tuesday, August 20th, 2024: Heliophysics Big Year and Math Enrichment Webinar

Many things are controlled by cycles, such as every September we start a new school year. There is also the 'Cycle of Life' that begins at birth and ends at death. This month we will explore our sun's life cycle and how Today's Sun is different from yesterday's and tomorrow's.

Math problems: Beginning: How long does it take an interstellar cloud to collapse into a star?; Introductory: How long can a star live by burning hydrogen into helium?; Advanced: What are the properties of stellar remnants like white dwarfs, neutron stars, and black holes?



Register for the Webinar

You can access past webinars here.

Additionally, take a look at the education resources on NASA's Heliophysics Big Ideas webpage. NASA HEAT is building a Framework for Heliophysics Education to provide the background and scaffolding educators need to incorporate heliophysics topics into existing STEM curricula. Using the three main questions that heliophysicists investigate as the foundation, we

Help us test NASA STEM curriculum!

PLANETS is an Out-of-School Time (OST) curriculum that is NASA-funded, and focuses on planetary science and engineering.

We are looking for OST educators to Beta test PLANETS in the Fall and Winter of 2024!

What are the benefits for educators?

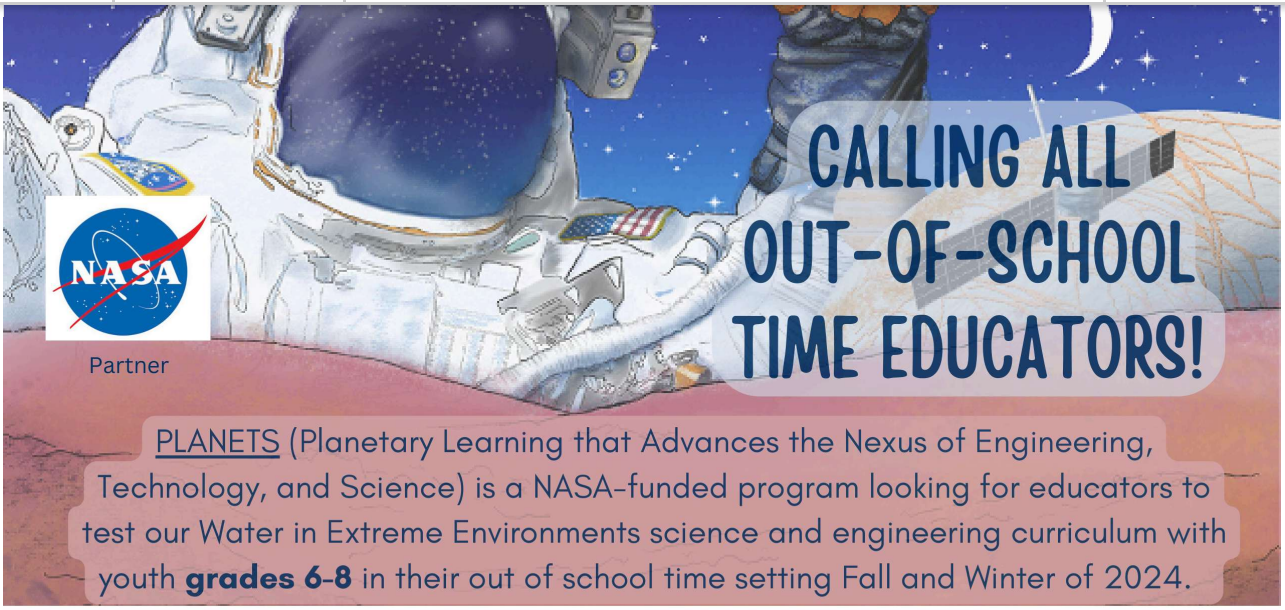
- Materials kit and digital guide ($450 value)
- $800-$1200 stipend upon conclusion of data collection
- Engage with NASA science and engineering
- Co-Create NASA Funded STEM curriculum

The Beta test will focus on educator perceptions of the curriculum and its accessibility for emergent multilingual learners, Indigenous youth, or youth experiencing differing physical and/or sensory abilities. Your expertise will help us improve materials

What you have to do:

- Attend an online orientation
- Participate in data collection activities
- Implement the PLANETS Water in Extreme Environments curriculum with your OST learners
- APPLY NOW: fill out the application by Aug 12, 2024
    - Application link: https://survey.alchemer.com/s3/7873892/PLANETS-Beta-Test-Application-Water-Unit

If you have any questions, you can contact Stephanie Jackson at stephanie.jackson@nau.edu or by phone at 928-523-9805.



Partner

PLANETS (Planetary Learning that Advances the Nexus of Engineering, Technology, and Science) is a NASA-funded program looking for educators to test our Water in Extreme Environments science and engineering curriculum with youth **grades 6-8** in their out of school time setting Fall and Winter of 2024.

PARTICIPATION BENEFITS!

- Materials ($450 value)
- **$800-$1200 stipend** upon conclusion of data collection

WHAT DO YOU NEED TO DO?

- **Application Deadline is August 12, 2024, at 11:59 p.m. PST**.
  **Only U.S. and U.S. territory applicants can be accepted.*
- Attend online orientation
- Implement PLANETS Space Hazard curriculum (18 total activities) with your middle school learners.
- Complete feedback forms
- Participate in follow-up interview

PLANETS will notify applicants by September 9, 2024.

Do you work with the following youth:

- **Indigenous Learners**
- **Multilingual learners**
- **Youth who:**
  - **are blind or low vision?**
  - **are deaf or hard of hearing?**
  - **have diverse physical abilities?**

For Questions & more info:
stephanie.jackson@nau.edu OR call 928-523-9805.

Apply here:
https://bit.ly/3XGhxSj

PLANETS
planets-stem.org

Apply Now!

The Astronomical Society of the Pacific is gearing up for hosting our annual **136th Virtual Conference: *Astronomy Across the Spectrum: Education & Outreach Everywhere, All at Once.*** If you're involved in science education, outreach, and communication at any level and for any audience, plan to experience inspirational speakers & panelists, participate in engaging workshops & discussions, see your friends & colleagues from around the world, and share with others the latest findings from your innovative teaching & public engagement work.

Register by August 18

Telescopes for Teachers / SuPerPiG Observing Grid

The Central Idaho Dark Sky Reserve STEM Network expanded its outreach programming this past year to include a new program called Telescopes for Teachers. This program provides K-12 teachers a long-term loan of a Unistellar eQuniox2 robotic telescope for their school. As of mid-July 2024, we have distributed 25 telescopes to teachers across the state of Idaho. Fourteen of these scopes are in schools that are classified by the Idaho State Department of Education as “rural”. We are excited to see the impact these scopes make as the school year begins. As part of the Telescopes for Teachers program, we are also kickstarting a citizen science project called the Short Period Planets Group (SuPerPiG) Observing Grid, where teachers will get the opportunity to observe exoplanet transits with their scopes and contribute to the Ultra Hot Jupiter studies being conducted at Boise State University.

Image credit: Unistellar

Resources, Lesson Plans, and Materials

[Read the current issue of NASA's Earthrise Newsletter!]

Role Model Strategies Guide: Encouraging Youth to Consider STEM Careers

This Role Model Strategies guide aims to change how youth think about science, technology, engineering, and math (STEM). Why are role models important? Sharing your lived experiences (your background, hobbies, and career goals) with youth can motivate them to pursue a career in STEM. Research shows that these strategies work towards breaking stereotypes. Seeing the variety of backgrounds, experience, and perspectives of STEM professionals can help inspire and motivate youth who might not otherwise "see" themselves in STEM. This booklet offers basic training for role models, introducing you to best practices for your volunteer efforts.

[Download the Role Model Strategies Guide]

Kinesthetic Telescope Activity

A physical activity to put yourself in the shoes (or stand!) of a MicroObservatory telescope. This activity is perfect for students learning about a telescope for the first time.

[Activity PDF]

NASA eClips Newsletter: Your Ultimate Summer Resource

Audience: Educators of grades K-12

Help learners STEMify their summer through hands-on and engaging activities curated by the NASA eClips team.

The latest NASA eClips newsletter has something for everyone - including eClips videos, resources, and design challenges, as well as partner activities and other recommended summer activities. Activities are organized by the amount of time they will take so you can easily plan your day around them.

Climate Resilience in Your Community

Climate Resilience in Your Community Activity Book (PDF, 5.1 MB)

Designed for learners in grades 3-8, this activity book helps young people learn about community resilience and discover ways that they can make a difference. Learners can keep track of points as they complete activities and earn a badge at the end! Each of the six sections of the book mirrors key concepts from the Community Resilience Education Theory of Change. The activity book was designed for both formal and informal education and includes an educators' guide.

Join NASA Connects

Registered community members will have the opportunity to sign up for engagement events, view and chat with other members who are interested in similar fields, read exclusive NextGen STEM content, and access resources such as lesson plans and interactive media.

Check out our latest knowledge articles that share NASA STEM content including activities, games, videos, educator guides, teacher toolkits, and much more.

NASA Partner

"The material contained in this document is based upon work supported by a National Aeronautics and Space Administration

The Rural Education Network team serves as volunteer representatives from NASA Partner projects funded through SciAct. We are aiming to amplify and elevate the voice of rural educators while providing access to resources that support educators in engaging youth in planetary science and STEM.
