



Winter 2019 Newsletter

Real World Resources for Educators to Inspire Students

Dear Educators,

While we know this time of year is busy for all, we also remember it's a time to give thanks. The NASA eClips team is very thankful for YOU, our educators and friends, and all you do to help inspire youth. We hope, in some small way, our resources may help you bring a little NASA into their lives.



Warmest Wishes,
The NASA eClips Team

In this Newsletter Edition...

NEW VIDEO RESOURCE! NASA eClips Video, *Real World: The Carbon Cycle - Essential for Life on Earth*

Utilize this resource in your classroom to unravel the mysteries behind the carbon cycle with your students.

NEW FEATURE VIDEO! NASA eClips Video, *Ask SME: Dr. Lola Fatoyinbo Agueh*

A unique close-up with Dr. Lola Fatoyinbo Agueh, one of our NASA Subject Matter Experts (SMEs) for the eClips video, *Real World: The Carbon Cycle - Essential for Life on Earth*.

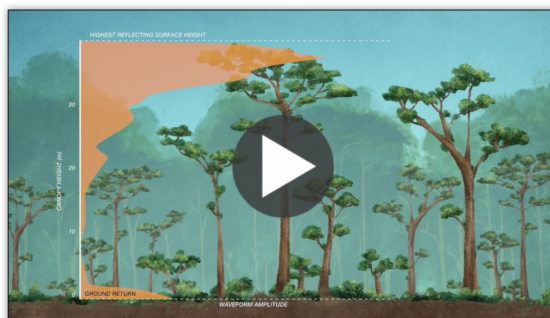
JOIN US! Upcoming Professional Development Days & Events

Virginia Association of Science Teachers (VAST) and NASA's Langley Research Center Science Directorate join the National Institute of Aerospace to offer Professional

Real World: The Carbon Cycle - Essential for Life on Earth

The Newest NASA eClips Video Resource

Carbon is an essential building block for life. Learning how carbon is converted through slow- and fast-moving cycles helps us understand how this life-sustaining element moves through the environment. Discover how NASA measures carbon through both field work and satellite imagery keeping watch through its eyes on the sky, on Earth, and in space.



Watch the video [here](#).

Ask SME: Dr. Lola Fatoyinbo Agueh

Close-up with a NASA Subject Matter Expert



Dr. Lola Fatoyinbo Agueh, a Research Physical Scientist at NASA's Goddard Space Flight Center, shares her journey from her childhood to current career in NASA eClips' first close-up feature video with a NASA Subject Matter Expert (SME).

Watch the video [here](#).

Related Resources



Learn more about [why carbon is so important](#) at NASA's [Climate Kids](#). Check out the [Climate Time Machine](#) to see how CO₂ and temperature levels have changed together throughout history. Find out more about the carbon cycle and how we strive to keep the right balance of greenhouse gases in the atmosphere. Play [OFFSET](#) and try to balance levels of carbon dioxide within Earth's atmosphere.



Partnering with the University of New Hampshire, [The GLOBE Program](#) has developed and compiled a suite of educational activities to assist educators in teaching the carbon cycle with the [Globe Carbon Cycle](#) project. Project team members have developed a [flowchart](#) in order to help you navigate the activities based on the level of knowledge of your students. You can begin with [educational activities](#) focused on the carbon cycle; perform experiments on plants to better understand photosynthesis and respiration and the role of plants in the carbon cycle; collect data in the field, forest or on



school grounds; and/or participate in carbon and biomass modeling.

At the [My NASA DATA](#) website, students learn how carbon dioxide concentration in the atmosphere is affected by processes involving trees, such as fires, deforestation, and plant respiration. Evaluate a Landsat image to determine the rate of carbon dioxide sequestration in a particular area in the mini lesson, [Carbon Dioxide: Production and Sequestration](#).

Related Events



Better Together: Connecting Educators with Engaging Resources Region 2 Workshop

Come join the Virginia Association of Science Teachers and the National Institute of Aerospace for a Professional Development Day!

- Training offered from the National Geographic Society and Geo-Inquiry Process with a Phase 1 Certification
- Engineering Activities for Science Classrooms using NASA eClips Resources
- Minute-to-Win-It Science Edition



The cost to participate is \$5.00 per attendee. Lunch is included at NIA. For payment and registration, please contact Becky Schnekser at rebeccaschnekser@capehenry.org.

When:

Saturday, December 7, 2019

Time:

9:00 AM - 12:00 PM

Location:

National Institute of Aerospace
100 Exploration Way
Hampton, Virginia 23666

Questions or Comments?

NIA Contact:

Joan Harper-Neely
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VAST Contact:

Becky Schnekser
rebeccaschnekser@capehenry.org

CENTER FOR INTEGRATIVE STEM EDUCATION

NATIONAL INSTITUTE OF AEROSPACE

FREE 'Just in Time' Workshop 2019-2020

"Learn it Today, Use it Tomorrow"

NASA's Langley Research Center Science Directorate and the National Institute of Aerospace's Center for Integrative STEM Education will offer a Professional Development Workshop to support science teachers of grades 6 through 12 entitled,



Click to register [here](#)!

When:

Saturday, March 21, 2020

Time:

8:30 AM - 12:30 PM

Location:

National Institute of Aerospace
100 Exploration Way
Hampton, Virginia 23666

Questions or Comments?

NIA Contact:

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NASA Spotlight Design Challenge

Help Students Become Science Content Creators



Would your students like their work to be featured on our website and social media? NASA encourages you and your class to produce a video for the NASA eClips website!

Teachers can use the [NASA Spotlight Design Challenge](#) to increase students' science literacy and communication skills. From research, to script, to screen, students build their own understanding of science concepts through creative video representations.

You can view all of the previous NASA Spotlight videos [here](#).

Registration is now open! Visit <http://bit.ly/ProduceNASASpotlightVideo>.



NASA eClips Teacher Advisory Board News & Updates

The NASA eClips Teacher Advisory Board has not only been hard at work reviewing newly produced videos and educator resources, members are out winning awards!

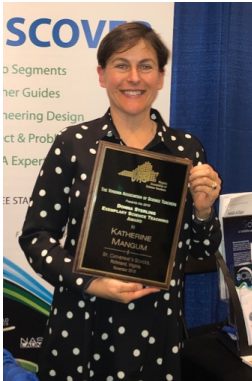
Congratulations to three board members on these amazing accomplishments!

Julie Back, Phoebus High School

Julie Back, a high school teacher from Phoebus High School in Hampton, Virginia, received the **Recognition in Science Education (RISE) Award** from the Virginia Association of Science Teachers



(VAST). VAST RISE Awards are presented to celebrate excellent work done by science educators across the state.



Katherine Magnum, St. Catherine's School

Katherine Magnum, from St. Catherine's School in Richmond, Virginia, received the **Donna Sterling Exemplary Science Teaching Award for K-5**. Along with this award, Katherine has been invited to Iceland for a National Geographic Family Journey during Summer 2020 and will receive professional development to study geothermal energy.



Dianna McDowell, Old Donation School

Dianna McDowell, a middle school teacher from Old Donation School in Virginia Beach, Virginia, was announced as a recipient of the **Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST)**. McDowell was selected by a distinguished panel of scientists, mathematicians, and educators for her distinction in the classroom and dedication to improving science, technology, engineering, and math (STEM) education.

New lessons added

GRADES 3-12

nearpod + NASA eClips

Explore real world connections to science concepts with NASA videos!

NEW NASA Spotlite Interactive Lessons on Nearpod!

Nearpod creates an inclusive and immersive learning experience by allowing students to actively participate in every lesson. Accounts are FREE for teachers!

Grades 3-5

- [NEW! Adaptation of Plants to Seasonal Changes](#)
- [NEW! Characteristics of Gases](#)
- [NEW! Living Plants](#)
- [NEW! Movement of Molecules During Phase Change](#)
- [NEW! Objects at Rest](#)
- [Sun's Positions](#)
- [Seasons](#)

Grades 6-9

- [Heat and Temperature](#)
- [Ozone Layer](#)

Grades 5-8

- [Clouds](#)
- [NEW! Composition of Earth's Atmosphere](#)
- [NEW! Density](#)
- [Mass and Weight](#)
- [Physical Change](#)

Grades 8-12

- [Stars](#)

NASA eClips Resources Featured on NOV8 with Promethean

Promethean is a NASA eClips partner that offers interactive lesson delivery software resources for teachers to display and utilize on classroom whiteboards. Over 25 NASA eClips educator guides are available on [Promethean's Classflow Marketplace](#) to provide examples of ways educators may effectively use video segments as an instructional tool. Presented in the 5-E delivery model, each guide includes objectives, background information, links to video clips, instructions for implementing inquiry-based lessons, additional resources related to the topic, and suggestions for extending and/or modifying lessons.



Visit the NASA eClips Website!