

# NASA eClips™ Spring 2020 Newsletter

Bringing STEM Alive Through NASA Real-World Connections

NASA eClips has online resources to support you and your students.



Happy 50th Earth Day to our NASA eClips educators and friends!

## In the Earth Day issue of our newsletter...

We want to focus primarily on resources that connect to Earth Day and illustrate NASA's role in scientific research that is used when making decisions about our environment. We celebrate Earth Day to *bring attention to and raise awareness of how to best protect our planet*. Because of the efforts of Earth Day advocates, the Clean Air Act and the Clean Water Act was established as some of the most influential modern environmental laws. Below are some facts about the history of Earth Day!

**WHO:** Senator Gaylord Nelson of Wisconsin is credited with starting Earth Day.

**WHEN:** The 1st Earth Day was celebrated on April 22, 1970.

**WHAT:** 20 million people nationwide attended the first Earth Day festivities. On the 20th Anniversary of Earth Day, 200 million people across the world participated in the celebration!

**WHERE:** The 1st Earth day was celebrated in major cities across the nation but has now expanded to over 141 different countries!

**EARTH DAY CHALLENGE:** Get students and their families engaged in Earth Day activities! Post your pictures to your social media pages and include our hashtag #NASAeClipsEarthDay50 for a chance to be featured. If you post to a website, please send us a link at [NASAEClips4D@gmail.com](mailto:NASAEClips4D@gmail.com).

**FEATURED ACTIVITY:** One great activity to use with your citizen scientists is the engineering design challenge [\*Designing a Cloud Cover Estimator\*](#).

In this activity, students have the opportunity to:

- Use an engineering design process to solve a problem;

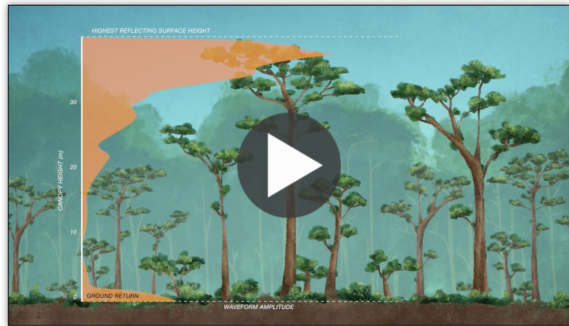
- Identify and describe the characteristics of the different types of clouds;
- Calculate the percent of cloud cover in the sky; and
- Identify the role clouds play in Earth's energy budget.

Click [here](#) to view the Educator Guide.  
Click [here](#) to view the Student Handout.

## Earth Day Classroom Resources

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

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](#).

Check out all the resources in the [NASA eClips Bundle: Carbon Cycle Collection](#)

### Real World: Earth Systems

Our Earth is a dynamic system with diverse subsystems that interact in complex ways.

- What are those subsystems and how do they interact?
- How are these subsystems and the global Earth system changing?
- What causes these changes?
- How does NASA monitor these changes?
- How can Earth system science provide societal benefit?



Watch the video [here](#).

### Real World: Citizen Science

What are citizen scientists? Why is their work so important to NASA? Join Dr. Michelle Thaller as she explains how the general public, using scientific protocols, careful observations and accurate measurements, can help NASA make exciting new discoveries. Find out how you can be a citizen scientist today.



Watch the video [here](#).



## Associated Earth Day Resources



### NASA's Goddard Space Flight Center - Connect the Spheres: Earth Systems Interactions

GLOBE: Earth as a System Community Find out about the different Earth as a System projects and campaigns. Lesson plans focused on Earth Systems are available for download [here](#).

My NASA Data: Earth as a System Learn more about each of the different spheres that make up the Earth's systems. Download Earth as a System lessons [here](#). Additionally, find out how Earth is really a "system of systems" [here](#).

## NASA eClips Earth Day Related Resources on Nearpod



Several of the NASA Spotlight interactive lessons published on Nearpod address Earth Day-related topics. Teachers can sign up for a free account [here](#).





---

## NASA eClips Teacher Advisory Board Highlights



**Karen Brace** is a fifth-grade teacher and Science Instructional Leader at Booker Elementary School in Hampton, Virginia.

She holds a Master's Degree in Elementary Education. Karen believes that, "One of the many highlights of being an educator is teaching students to develop a love of learning. Students are naturally curious. Science provides an opportunity for students to be motivated and to learn from their curiosity."

Karen was the Booker Elementary Teacher of the Year for 2017-2018. This is her third year serving on the NASA eClips Teacher Advisory Board.



**Judy Deichman** is an Instructional Specialist for Library Media Services for Richmond Public Schools in Richmond, Virginia.

Judy is a National Board Certified Librarian who has worked with students for 10 years. In addition to serving on the NASA eClips Teacher Advisory Board, she also serves as the Treasurer of the American Association of School Librarians and chairs the Professional Development Committee of the Virginia Association of School Librarians. Judy says, "I love sharing resources and exciting new ways to learn with my students. I truly believe that you learn the most when you are engaged and having fun!"



**Amber DeWinter** teaches social studies and STEM classes at her alma mater, Cache High School, in Cache, Oklahoma.

Amber earned both her Bachelor's Degree in International Studies and her Master's Degree in 21st Century Teaching and Learning from the University of Oklahoma. In addition, Amber has obtained her Google Level 1 certification and NASA BEST (Beginning Engineering, Science, Technology) certification.

This is Amber's first year on the NASA eClips Teacher Advisory Board.

---

## NASA Resources for Students to



# Explore Independently

Students can visit our NASA eClips™ Website to explore videos on their own.

- [NASA Space Place](#)
- [NASA Kids' Club](#)
- [NASA Home & City](#)
- [NASA Climate Kids](#)
- [Challenger Center - STEM Resources for Elementary School](#)
- [Infiniscope](#)

---

## Upcoming Events

Join us at the [2020 American Federation of Teachers \(AFT\) Share My Lesson Virtual Conference](#).

**Wednesday, March 25, 2020, 3PM EDT**

Once you register, please look for the NASA eClips session:

- NASA eClips: Hands-On STEM Activities for the Sun, Earth and Moon



[Visit our NASA eClips™ Website](#)

