

# What's New at NASA eClips? Loads of new videos and resources!

Need **NEW RESOURCES** to introduce at your summer professional development or staff meetings? Well you are in luck! We've just released a new batch of resources for you to review, discuss with your colleagues, and integrate into your lesson plans for the 2018-19 academic year!

Visit our Website

### **NEW VIDEOS**

### We go to EXTREMES for you!

Kids of all ages love learning about weird organisms and the hostile environments in which they live. With our two new videos about **EXTREMOPHILES**, students learn the characteristics of what makes an organism an extremophile and where in our solar system these amazing creatures could be found.



### Our World: What is an Extremophile?

Almost every possible environment on Earth is home to a living organism, no matter how hostile the environment may seem. But what can these **extremophiles** tell us about life on our planet or the possibility of life in the universe?



## Our World: Where Do We Find Extremophiles?

We look for environments that push the limits for ordinary living organisms. NASA conducts analog testing in these extreme environments to better understand life on Earth and identify the potential for life in the universe.

#### Small Satellites - Big Discoveries

Small, modular, and inexpensive to build and launch, **CubeSats** are opening up space exploration like never before. They offer a new world of possibilities in research and technology development to everyone. -www.jpl.nasa.gov/cubesat



# Real World: CubeSats - Changing the Way We Do Science

CubeSats are changing the way we collect information. They may be small, but these little satellites are helping us answer big questions. And using a swarm of CubeSats can give us simultaneous measurements without repeatedly sending commands to the satellite to tell it what to



#### Real World: CubeSats - A Satellite Small Enough to Fit in Your Hand

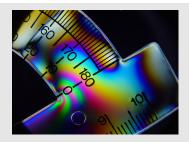
Satellites are expensive to build and expensive to get into space. With all the changes in technology, is there a way to make satellites smaller? Find out just what NASA can pack into a 1U CubeSat, a satellite small enough to fit in your hand.



#### NASA eClips™ Educator Guide - Our World: Designing a Cloud Cover Estimator

Students will think and act like engineers and scientists as they follow the five steps of the Design Process to successfully complete a team challenge.

Students view the NASA Spotlite: Clouds video that corrects the misconception that a cloud's only purpose is to produce precipitation. Students design, measure, build, test and redesign a cloud cover estimator to measure the amount of cloud cover in the sky. From this, students discuss the role clouds play in Earth's energy balance.



# NASA eClips Guide Lites Interactive Lesson Testing...1, 2, 3...Testing: Nondestructive Evaluation

Students learn how cross-polarizers are used to view the light refraction and birefringence produced in transparent plastics, a means of nondestructive visual evaluation that can be used to analy ze the extent and degree of stress in a clear or transparent plastic material.

Did you know nondestructive testing was used to examine an early artifact from the 1607 fort at Jamestown, Virginia? Find out how by viewing: NASA eClips Our World: NASA at Jamestown.

#### Connecting lessons and activities with NASA Spotlite videos

NASA Spotlites are student-produced videos addressing common science misconceptions paired with interactive lessons and subject matter expert interviews to offer real-world connections.

# Exciting Partnership - Another Way to Bring NASA eClips Into Your Classroom



NASA eClips has partnered with Nearpod to bring you FREE interactive lessons for grades 3-12!

<u>Nearpod</u> creates an inclusive and immersive learning experience by allowing students to actively participate in every lesson!

## **COMING SOON!!!**

When you return rested and refreshed from your summer vacation, we will have a <u>NEW LOOK!</u> We can't wait for you to see all the changes to our website and videos! Now you have something else to look forward to as you start the new school year.

STAY CONNECTED



