



SMSC February 2021 Newsletter

News This Month

NASA celebrates Black History Month - From astronauts to scientists to leaders, African-Americans have played a vital role in NASA's achievements. Learn more about their contributions by visiting the image gallery at [this link](#) and download a crossword puzzle.

The James Webb Space Telescope will be launched in the fall this year and we are planning to promote several activities to coincide with this event. "Webb will examine every phase of cosmic history: from the first luminous glows after the Big Bang to the formation of galaxies, stars, and planets to the evolution of our own solar system." Read more about the science [HERE](#) and check out the [materials for educators](#).

We have a slack channel - if you would like to be added to the channel to discuss ways to use NASA resources locally, or if you have questions about how we can help you meet your goals, please send an email to r_neff@southwesterncc.edu or you can follow us on [Facebook](#) or [Twitter](#).

NASA NEWS

Lucy Mission in Space Contest - deadline March 16, 2021

- Middle school students will design a "mission patch" showing how the process of evolution on Earth may parallel the evolution of the solar system and explain the patch design with a poem or short essay.
- High school students will create a message to any future finders of the Lucy spacecraft, which will likely orbit the sun for more than one million years and could be recovered by our descendants in the distant future. The message, in the form of original artwork or short video

and an essay or poem, should highlight humankind's drive to explore, discover, and understand our origins on Earth and in the solar system. Entries should emphasize the connection between the discovery of the Lucy fossil and NASA's Lucy space mission.

<https://www.nasa.gov/feature/nasa-invites-students-to-join-lucy-mission-in-space-contest/>

The year in [NASA Spinoff](#) technologies:

- NASA's [support for small businesses](#) has paid off with safer hip replacements, more efficient supercomputer coolers, and even better water bottles.
- [Efforts to keep astronauts' food safe](#) on the way to the Moon have drastically reduced the incidence of food-borne illness around the world.
- [Years of air traffic research](#) helped shape software that enables airports to track airplanes, predict weather impacts, and find alternative flight paths.



On Feb. 18, 2021, [NASA's Mars Perseverance rover](#) will touch down on Mars. The toolkit has ways you can take part in this landing. You can also [sign up](#) to send your name to Mars in 2026! In addition, check out [this video](#) from July 2020 to zoom in to see the surface of Mars explained by a Geologist (starts @ 5min.) [Landing Toolkit](#)

K-12 Curriculum Materials

REPOSITORY ALIGNED TO NC STATE STANDARDS

<https://www.southwesterncc.edu/stem-repository>

MATERIALS AVAILABLE FOR CLASSROOMS

(send an email to r_neff@southwesterncc.edu to claim these for your classroom)

- The GLOBE Program information guide & activity connections to NGSS
- Astrobiology Curriculum guide and graphic story books
- Far Out Math Activities for grades 9-12
- Far Out Math Activities for grades 5-12
- Class set (20) TI-84 graphing calculators

ONLINE

Learn basic coding using data from [NASA's Chandra X-ray Observatory](#) and other satellites on exploded stars, star-forming regions, and black holes.

Professional Development

2/22/21 [1pm online] Fired Up Over Math: Studying Wildfires - Learn how scientists assess wildfires using remote sensing. Students then use some of the same techniques to solve grade-level appropriate math problems.

<https://origin-www.eventscloud.com/ehome/index.php?eventid=600603&>



Opportunities

DEVELOP addresses environmental and public policy issues through interdisciplinary research projects that apply the lens of NASA Earth observations to community concerns around the globe. Bridging the gap between NASA Earth Science and society, DEVELOP builds capacity in both participants and partner organizations to better prepare them to address the challenges that face our society and future generations.

Summer 2021 Term:

The DEVELOP summer 2021 term will be conducted virtually.

All accepted participants will work remotely from within the United States.

Application Window: January 18 - February 26

Recommendations Due: March 12

Applicant Notifications: April - May

Term Dates: June 7 - August 13

Learn more and apply at: <https://develop.larc.nasa.gov/apply.php>

February 19, 2021 - Registration closes for Cubes in Space™, a program by idoodledu inc., offered at no cost, for students 11-18 years of age to design and **propose experiments** to launch into space or a near space environment on a NASA sounding rocket and zero-pressure scientific balloon. <https://www.cubesinspace.com/index.html>

April 1 at 11:59 p.m. EST - CTE Month® and NASA HUNCH 2020-2021 Student Video Challenge submission deadline. This year's theme: [Advancing Space Exploration through Manufacturing](#)

For Libraries & Community Groups

What's Up for February? From JPL

This month [we follow the Moon](#) to three different points of interest in the winter sky.

Girls STEAM into Astrophysics

The new Program Cookbook from [Girls STEAM Ahead with NASA](#) guides facilitators in planning events using resources from [NASA's Universe of Learning](#). Follow pre-set, scaffolded scenarios that explore [light](#), [data and image processing](#), or create your own scenario using an event-planning sheet.