National Aeronautics and Space Administration

the Space Place

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NEWS AND NOTES FOR FORMAL AND INFORMAL EDUCATORS

The Space Place is a NASA website for elementary school-aged kids, their teachers, and their parents.

It's colorful!
It's dynamic!
It's fun!

It's rich with science, technology, engineering, and math content!

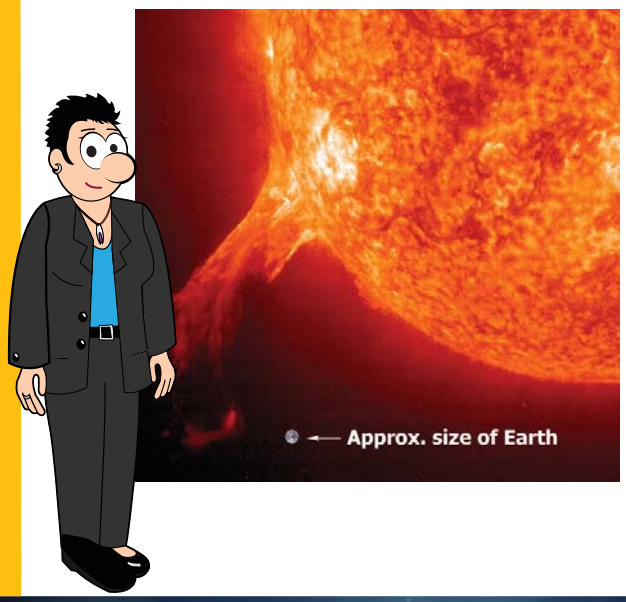
It's informal.
It's meaty.
It's easy to read and understand.
It's also in Spanish.
And it's free!

It has over 150 separate modules for kids, including hands-on projects, interactive games, animated cartoons, and amazing facts about space and Earth science and technology.

Earth is in the lucky position to have a love-hate relationship with its star. We say lucky, because obviously we couldn't live without it, but at times it's a little difficult to live with it as well. We call the conditions around our planet, outside of its own atmosphere and magnetosphere, "space weather," but it definitely affects us on Earth too. It's a good thing we are learning to understand and predict the sun's "tantrums."

Let's start here

"Space Place Live!" is a cartoon "talk show" where Space Place characters interview real NASA scientists and engineers. The latest episode stars Merav Opher, astrophysicist. She studies how stars work, including our star. In this 7-minute video, we learn about the solar wind, solar flares, the heliosphere, and the environment the Sun creates for everything in the solar system. Dr. Opher also talks about how she got interested in physics and what else she likes to do for fun. Check it out at spaceplace.nasa.gov/space-place-live/#opher.



Space Place en español

La historia de una extraña noche de tormenta (solar)... tells the story of a strange and (solar) stormy night. Along with a story of the severe solar storm of August 1859, where the Northern Lights were seen as far south as Central America, "Shields Up!" (¡Escudos arriba!") is a game in which the player has to protect Earth-orbiting satellites from the wrath of bad space weather. The game and article are available in Spanish and English. See spaceplace.nasa.gov/sp/shields-up.

Spotlight on all things Sunny . . .

Heliophysics, or the physics of the Sun, is one of the four major science thrusts of NASA's Science Mission Directorate. (The others are astrophysics, Earth science, and the solar system.) On The Space Place, these translate to the menu tabs Space, Sun, Earth, and Solar System.

The Sun-Earth connection is so important in understanding our immediate environment. The Sun menu (spaceplace.nasa.gov/menu/sun) offers activities, games, and fun facts about the Sun and how it affects Earth. The most comprehensive treatment of this relationship is the animated, narrated storybook "Super Star Meets the Plucky Planet: Or, how Earth and Sun come to mutual understanding and respect." It is also available to print and read aloud or have the students read aloud (spaceplace.nasa.gov/story-superstar).

For the classroom

The Gallery of Sun images (spaceplace.nasa.gov/gallery-sun) is just for teachers to print and post in the classroom. They have large, simple captions.

For out of school time

"Satellite Insight" is an absorbing game for all ages that runs on both computer and iPhone or iPad. It is Tetris-like, where six tile colors represent different types of data measured and recorded by the GOES-R satellite. Bonus material explains what each of the tile colors stand for, such as clouds, lightning, and solar energy. A lot of them stand for data related to space weather.

Special Days

Jan. 7, 1610: Galileo discovered Jupiter's four largest moons.

Explore Jupiter's big moons in the Solar System Explorer game. spaceplace.nasa.gov/solar-system-explorer

Jan. 15, 2006: Stardust mission capsule returned comet samples to Earth.

Learn about comets and how they are different from asteroid with the Comet vs. Asteroids 4-page color brochure. spaceplace.nasa.gov/posters /#asteroids

Jan. 31, 1958: Explorer 1 was the first U.S. satellite launched into orbit.

How do orbits work, anyway? Find out by putting a cannonball into orbit! spaceplace.nasa.gov/how-orbits-work

Feb. 9, 1894: Hershey Chocolate Company founded.

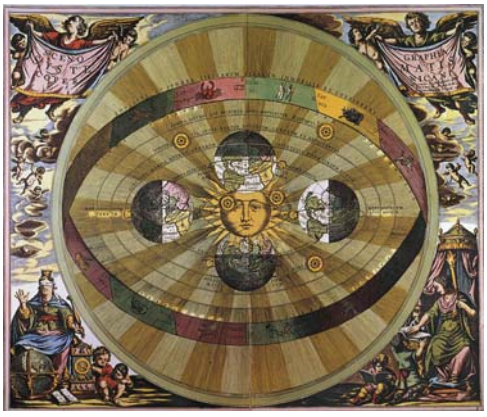
Although made by a different company, celebrate chocolate and the Moon with the Oreo Cookie Moon activity. spaceplace.nasa.gov/oreo-moon

Feb. 19, 1473: Nicolaus Copernicus born

He thought the Sun was the center of the Universe. He was wrong. But just where IS the center? Dr. Marc answers in a short Podcast. spaceplace.nasa.gov/podcasts/#center

Feb. 22: Thinking Day.

The Spitzer memory game will make you think very hard. spaceplace.nasa.gov/spitzer-concentration



Send feedback

Please let us know your ideas about ways to use The Space Place in your teaching. Send to info@spaceplace.nasa.gov.