



# 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.

*Space is harsh! It's vicious!  
It reminds us every day.  
There's heat and cold and Sun that blasts  
All objects in its way,  
The zero-g, no gravity!  
A Galactic Cosmic Ray!  
And not a whiff of air to breathe.  
Nor guide to show the way.*

*At the Space Place, we have plenty to remind you of the nature of nature when you leave Mother Earth.*

### New from the Space Place

It was a dark and stormy August night in 1859 . . . solar stormy, that is. A solar storm caused such bright Northern Lights that gold miners in the Rockies were frying up bacon and eggs at 1:00 AM thinking the Sun was up.



Violent storms on the Sun blast out charged particles and radiation that can damage satellites, power grids, and communication and navigation systems. In the new game **"Shields Up!"** you are in charge of protecting three satellites by putting them into "safe" mode whenever bad stuff is coming their way. The geostationary satellite, GOES-R, monitors the Sun's surface and warns the other satellites when they need to get ready for the worst.

Put your **Shields Up!** and save those satellites at [spaceplace.nasa.gov/shields-up](http://spaceplace.nasa.gov/shields-up).

### Space Place en español

**Black Hole Rescue!** en español is a challenging game in which you must spell out black-hole-related vocabulary words by clicking on moving letter tiles that have been dropped into a swirling vortex of matter that is slowly being devoured by a black hole. Talk about a harsh environment! So time is of the essence!



This is a good language arts game for Spanish speakers or learners. Accented letters must be matched too. No substituting an "n" for an "ñ" or an "e" for an "é." Rescue words from the black hole at [spaceplace.nasa.gov/sp/black-hole-rescue](http://spaceplace.nasa.gov/sp/black-hole-rescue).

### New Space Place "Listmania®"

"Customers who bought this item also bought . . ." is a common marketing ploy on popular retail websites. Well, The Space Place team knows a good idea when we see one, and we are not above borrowing. You will now find recommendations at the bottom of every Space Place article, game, or activity. There's a lot of "cross-pollination" on the site, so these suggestions should help visitors deepen their appreciation for any topic that engages their interest.

## For the classroom

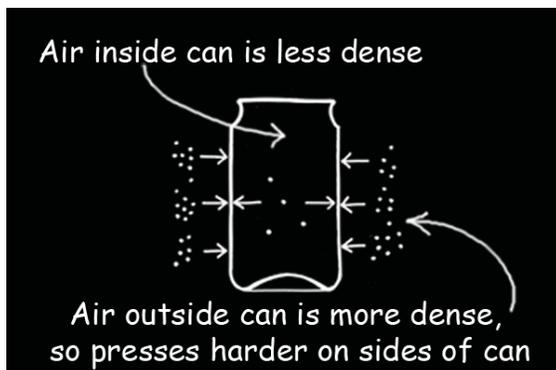
What's the weirdest, most alien place you can imagine? Well, no matter how extreme your imaginary world, there's probably something like it somewhere in the universe, probably in our own galaxy. Even our own solar system has some real doozies. Methane rain on Saturn's moon



Titan? Crushing pressures in Jupiter's atmosphere? A surface hot enough to melt lead on Venus? So, how do space scientists and engineers know what kinds of science instruments (cameras, spectrometers, etc.) to put on spacecraft that are destined for one of these strange places? The classroom activity "Designing for the Barely Imaginable" explains these planetary science instruments as extensions of our five senses, with each type of instrument analogous to eyes, ears, noses, etc. The activity invites students to imagine and describe an alien world, then design a pretend mission to explore that world, and give the results! This activity involves engineering design, physics, Earth science, and language arts. Find it at [spaceplace.nasa.gov/classroom-activities/#alienworld](http://spaceplace.nasa.gov/classroom-activities/#alienworld).

## For out of school time

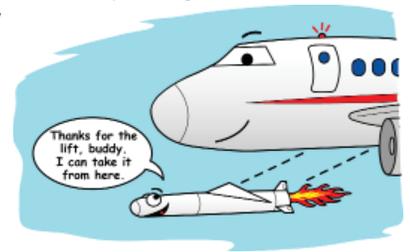
Here's a classic physics experiment with a space exploration twist. Crush an aluminum can without even touching it. This version of the activity is presented in the context of testing a new spacecraft material. How would this material work in the harsh vacuum of space? The activity does require pouring a small amount of boiling water into an empty soft-drink can, which an adult can do, but the rest is very doable by a child. And the result is a dramatic demonstration (and explanation) of atmospheric pressure. Makes it look as if we ourselves withstand a measure of harshness under the weight of our own atmosphere. It's at [spaceplace.nasa.gov/soda-can-test](http://spaceplace.nasa.gov/soda-can-test).



## Special Days

### May 2, 1953: First commercial jet flight

Why can't we just fly into space? Read about a rocket that hitches an airplane ride for part of the trip to space. [spaceplace.nasa.gov/galex-pegasus](http://spaceplace.nasa.gov/galex-pegasus).



### May 17: Pack Rat Day

You can't afford to be a pack rat when you are packing for a trip to Mars. Try this fun, geometry-oriented activity for your class. [spaceplace.nasa.gov/classroom-activities/#marspacking](http://spaceplace.nasa.gov/classroom-activities/#marspacking).

### May 18, 1980: Mt. St. Helens erupted, completely blowing off its top

Volcanos look amazing from space. See Mt. St. Helens and others at [spaceplace.nasa.gov/gallery-earth/#volcanos](http://spaceplace.nasa.gov/gallery-earth/#volcanos).

### June 5: World Environment Day

How are satellites helping us understand and care for the environment? One way is by tracking migrating endangered animals. [spaceplace.nasa.gov/migration](http://spaceplace.nasa.gov/migration).

### June 15: Nature Photography Day

Kids can make their own pinhole cameras and take awesome nature pictures, while learning about light. [spaceplace.nasa.gov/classroom-activities/#pinhole](http://spaceplace.nasa.gov/classroom-activities/#pinhole).

### June 16, 1914: Birthday of Lyman Spitzer, Jr.

He was a great scientist, and the Spitzer Space Telescope is named for him. Read how it was invented to make a dream come true. [spaceplace.nasa.gov/story-lucy](http://spaceplace.nasa.gov/story-lucy).



## And another thing . . .

If you are taking a vacation from the classroom, have a wonderful, restorative summer. Before you let those kids go, however, remind them to visit The Space Place in between their other screen-related activities!