



# NASA SpacePlace

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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 130 (and counting) separate modules for kids, including hands-on projects, interactive games, animated cartoons, and amazing facts about space and Earth science and technology.

## Here's the Latest on [spaceplace.nasa.gov](http://spaceplace.nasa.gov) . . .

"Astronaut" is the identity kids try on as they imagine being part of the space program. Now there's an activity on The Space Place that can help them get



into the spirit of exploration and start thinking about what it could be like to live on the Moon. "Build a Moon Habitat" ([spaceplace.nasa.gov/en/kids/exploration/habitat](http://spaceplace.nasa.gov/en/kids/exploration/habitat)) is a hands-on construction project that creates a kid-sized play structure—complete with "airlock"—for surviving on the surface of an airless, alien world.

Using layers of newspapers, packaging tape, stapler, and bed sheet, kids (and grown-ups, if allowed) can work together to make the habitat, and then have fun playing in it indefinitely.

The habitat roughly resembles a prototype habitat being tested by NASA's Exploration Technology Development Program, which is helping to get NASA ready to return humans to the Moon. This and other really cool lunar outpost technologies will make further appearances at The Space Place in the future.

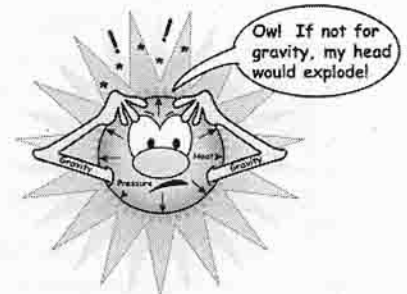
## Space Place en Español

Our own Space Place scientist, Dr. Marc Rayman, has answered many questions submitted by our partner museums. His short,

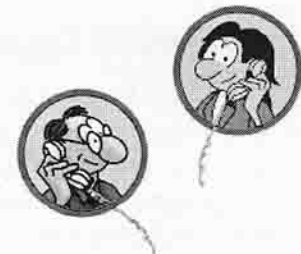
pithy, and easy-to-understand answers are archived at The Space Place, in both English and Spanish ([spaceplace.nasa.gov/en/kids/phonedrmarc](http://spaceplace.nasa.gov/en/kids/phonedrmarc) and [spaceplace.nasa.gov/sp/kids/phonedrmarc](http://spaceplace.nasa.gov/sp/kids/phonedrmarc)).

Many of the answers are also spoken aloud online, so visitors can read along while listening. The English versions are read by "Dr. Marc" himself, and the Spanish ones by "Engineer Ruth" Frogoso, our bi-lingual Space Place engineering advisor.

Example questions are "How are supernovas formed and are any getting ready to form now?" "How do we know dark matter exists if we can't see it?" and "If spacecraft sent to other planets don't come back to Earth, how do we get pictures from them?"



These pages are excellent helps for both Spanish learners and English learners. The texts are interesting and challenging enough to be heard and read repeatedly, thus reinforcing the language learning as well.



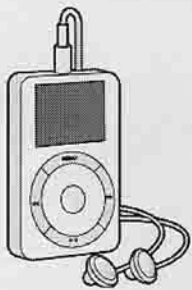
## Spotlight on "Topics and Terms"

You need a map to a website as extensive as The Space Place. The map will not only help you see where you are, but will give you an idea of the sheer scope of the site, which would otherwise take you hours of browsing. The site map cuts the content several ways: It lists the modules by the left-side menu categories (Games, Projects, Animations, Amazing Facts, etc.), by NASA missions sponsoring the site, and by the topics and terms included in the site content ([spaceplace.nasa.gov/en/site\\_map.shtml#terms](http://spaceplace.nasa.gov/en/site_map.shtml#terms)). This listing alone currently has nearly 150 entries.

Examples of terms perhaps not expected to be found on a website for kids are Big Bang, black holes, speed of light, time travel, and hexadecimal numbers. But, believe it or not, these and all the other terms are, indeed, explained in clear, ordinary language.

Go browsing on the Topics and Terms list and click on whatever tickles your curiosity!

## For the Classroom



"For the classroom" also means "for the teacher." One feature for teachers is a series of Podcasts. You can subscribe, or just listen to the MP3 files on your computer. Transcripts are also available to print or just read along with the dialogs.

Now, why should you care? Well, maybe you've always wondered just where IS the center of the universe? Or, what would happen if the Sun became a black hole? Or, how did the Milky Way get its name? Of course, these are also questions you may have heard from your students and weren't quite ready to answer. Now, you can be!

Each Podcast is a short, informal conversation between Space Place writer Diane Fisher and JPL scientist and Space Place science advisor, "Dr. Marc" Rayman. Find the Podcasts at [spaceplace.nasa.gov/en/educators/podcast](http://spaceplace.nasa.gov/en/educators/podcast).

## Celebrate Special Days

### December 6, 1945: Microwave Oven Invented

What ARE microwaves anyway? What else can be done with them? Visit the Land of the Magic Windows at [spaceplace.nasa.gov/en/kids/chandra.shtml](http://spaceplace.nasa.gov/en/kids/chandra.shtml) and find out about microwaves and all the other kinds of light.

### December 11, 1719: Northern Lights recorded

The aurora borealis, or Northern Lights, was first recorded. What causes these beautiful, dancing curtains of color in the sky? Could it be simply a case of solar indigestion? Find out at [spaceplace.nasa.gov/en/kids/goes/spaceweather](http://spaceplace.nasa.gov/en/kids/goes/spaceweather).

### December 21, 1919: Crossword puzzle published

for the first time. This was no doubt the kind you solve with a pencil and a good eraser. Try the ones on The Space Place and you won't need any silly old eraser! They are at [spaceplace.nasa.gov/en/kids/misr\\_xword/misr\\_xword1.shtml](http://spaceplace.nasa.gov/en/kids/misr_xword/misr_xword1.shtml) and [spaceplace.nasa.gov/en/kids/ki\\_do1.shtml](http://spaceplace.nasa.gov/en/kids/ki_do1.shtml).

### January 4: Trivia Day

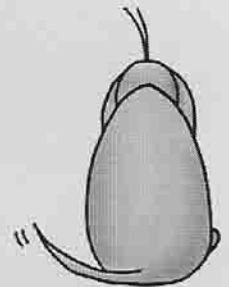
The Trivia Game on The Space Place reviews many of the concepts explained on the site. Answers are easy, though, if you just use common sense. If you want to know more, each question is linked to the page that tells all about it. There's also a text version that could be printed, cut up and pasted onto 3x5 cards for a fun classroom game. Check it out at [spaceplace.nasa.gov/en/kids/trivia/trivia.shtml](http://spaceplace.nasa.gov/en/kids/trivia/trivia.shtml).

### January 15, 2006: Comet dust returned

The sample return capsule from the Stardust mission brought comet dust back to Earth. Find out more about this pioneering mission and the weird stuff that enabled it to catch "stardust." Read and listen to "Ode to Aerogel" at [spaceplace.nasa.gov/en/kids/stardust/aerogel.shtml](http://spaceplace.nasa.gov/en/kids/stardust/aerogel.shtml).

### January 31: Backward Day

It's amazing how many things in our everyday lives are backwards—or upside down—and we don't even know it! Like objects in mirrors, or images as seen through a lens, or even images on the inside of our own eyeballs! Check it out at [spaceplace.nasa.gov/en/kids/ds3riddle.shtml](http://spaceplace.nasa.gov/en/kids/ds3riddle.shtml).



## How do you use The Space Place?

Some of our Newspapers in Education partners have published the entire Space Place Newsletter in their printed newspaper or linked to the .pdf file from their websites. Their readers have found the newsletter's pointers to The Space Place to be very helpful. One example is the NIE page on the website of the Columbus Dispatch in Columbus, OH (<http://www.dispatchnie.com/live/content/news/nasa.html>).