NASA Science

Using the vantage point of space, NASA’s Science Mission Directorate seeks to achieve (with the science community and our partners) a deep scientific understanding of our planet, other planets and solar system bodies, the interplanetary environment, the Sun and its effects on the solar system, and the universe beyond. In so doing, we lay the intellectual foundation for the robotic and human expeditions of the future while meeting today’s needs for scientific information to address national concerns, such as climate change and space weather. At every step we share the journey of scientific exploration with the public and partner with others to substantially improve science, technology, engineering and mathematics (STEM) education nationwide.

Visit http://science.nasa.gov for the latest information on this quest.

Watch the NASA Science YouTube channel at https://www.youtube.com/user/ScienceAtNASA/

The moon phases in this calendar are given in UTC (Coordinated Universal Time).

NASA Space Place

NASA’s award-winning Space Place website engages upper-elementary-aged children in space and Earth science through interactive games, hands-on activities, fun articles, and short videos. With material in both English and Spanish and numerous resources for parents and teachers, Space Place has something for everyone. Learn about everything from black holes and wild space weather to the reasons for seasons here on Earth. NASA Space Place has material on space, the Sun, the Solar System, our own planet, and the science and technology that make discovery possible.

Visit NASA Space Place at http://spaceplace.nasa.gov

Keep up with what’s new on our Space Place Facebook page at https://www.facebook.com/nasaspaceplace

Follow us on Twitter: https://twitter.com/nasaspaceplace

See the Space Place YouTube channel at https://www.youtube.com/user/nasaspaceplace
NASA's New Horizons spacecraft captured this high-resolution enhanced-color view of Pluto on July 14, 2015.

Image Credit: NASA/JHUAPL/SwRI

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**JULY 2016**

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**On this calendar ✄ means spaceplace.nasa.gov/**

1. First U.S. zoo opened in 1874 in Philadelphia, PA. Many zoos give homes to endangered species. How can satellites help these animals in the wild? ✄ ( juegos)

2. Voyager 2 flew by Jupiter and discovered the Jovian moon Adrastea in 1979. Play “JunoQuest” and help unravel more Jupiter mysteries. ✄ ( juegos)

3. Earth at aphelion, the time of the year when we are farthest from the Sun. Why isn’t it cold if we are farthest from the Sun? ✄ ( seasons)


5. Apollo 11’s moon was the first vehicle driven on the Moon, 1971. See a picture of the lunar rover! ( gallery-earth/moon)

6. Galileo spacecraft dropped its probe into Jupiter’s atmosphere this day in 1995. Read about Jupiter at ✄ (all-about-jupiter/)

7. Neil Armstrong was the first human to walk on the Moon this day in 1969. Why is the Moon so scarred with craters? ✄ (craters/)

8. On this calendar ✄ means spaceplace.nasa.gov/

9. Anti-boredom Month: Fight boredom by playing games at Space Place. ✄ (menu/play)

10. NASA Space Place can also be found at http://science.nasa.gov/kids.
This image, released for Hubble's 17th anniversary, shows a region of star birth and death in the Carina Nebula. The nebula contains at least a dozen brilliant stars that are 50 to 100 times the mass of our Sun.

Image Credit: NASA/ESA

Joseph Priestley discovered oxygen in 1774. Oxygen is great to breathe. It also makes up part of greenhouse gas molecules.

Tell A Joke Day. Make a robot puzzle, give it to friends, and test their sense of humor.

Tell A joke. Make a robot puzzle, give it to friends, and test their sense of humor.

Voyager 2 flew by Saturn in 1981. Saturn has its very own page at /all-about-saturn/

On this calendar /means spaceplace.nasa.gov/

National Relaxation Day. Lie under a tree and watch the pigeons fly by. Are they in a race home? Will they get lost?

Today, Venus and Jupiter will be very close together in the night sky. Discover why planets are round!
A photo of Howland Forest in Maine, one of the regions AirMoss has studied using radar measurements of root-zone soil moisture to help determine the overall carbon exchange between plants and the atmosphere.

Image Credit: National Science Foundation

NASA Space Place can also be found at http://science.nasa.gov/kids.
This artist’s rendering shows the orbits of the Magnetospheric Multiscale (MMS) mission, a Solar Terrestrial Probes mission comprising four identically instrumented spacecraft that will study the Earth’s magnetosphere.

Image Credit: NASA MMS

On this calendar means spaceplace.nasa.gov

On October 29, 2016:

- The launch of GOES-18, the first weather satellite to take pictures of Earth at night.
- Halloween

On October 30, 2016:

- International Animation Day. Check out our “snappy” animations about science.
A galaxy about 23 million light-years away is the site of impressive, ongoing fireworks. Rather than paper, powder, and fire, this galactic light show involves a giant black hole, shock waves, and vast reservoirs of gas.

Image Credit: NASA/CXC/JPL-Caltech/STScI/NSF/NRAO/VLA
Geminids meteor shower at maximum early this morning. What causes a meteor shower? /meteor-shower

Winter Solstice, first day of winter. What causes the seasons? /seasons

Apollo 17, the last of the Apollo moon-landing missions, returned to Earth in 1972. Did they find water ice on the Moon? /i-see-ice

Christmas Day. If you get an iPad or iPhone for Christmas, we have great more gifts for you. /ios

First powered flight by the Wright Brothers in 1903. Did their invention just come out of the blue? /classroom-activities/#history

Pioneer 10 flew past Jupiter in 1973. Play JunoQuest to explore the mysteries of Jupiter! /junoquest

On this calendar ➡️ means spaceplace.nasa.gov/
This pair of images shows color-coded maps from NASA's Dawn mission, revealing the highs and lows of topography on the surface of dwarf planet Ceres.

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<td>New Year's Day</td>
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<td>Earth at perihelion, the time of year when it is closest to the Sun, just how close is Earth to the Sun right now? [Inc. 3]</td>
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<td>Physical Stephen W. Hawking born 1942. He writes about black holes. How does it &quot;sound&quot; when a star is swallowed by a black hole? [Inc. 3]</td>
<td>[Fourth Week]</td>
<td>[Third Week]</td>
<td>[Second Week]</td>
<td>[First Week]</td>
<td>[Last Day of Month]</td>
<td>[Galileo Galilei first spots, in 1610, what became known as Jupiter's Galilean moons. How do these moons interact with each other and their massive parent? [Inc. 3]</td>
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<td>Martin Luther King day</td>
<td>[Diam. 3]</td>
<td>Ben Franklin's birthday, 1706. Skin played the violin. Perhaps he played one made during the little ice age? [Inc. 3]</td>
<td>[Diam. 3]</td>
<td>Penguin Awareness Day. Emperor penguins migrate each year to breed. What other animals migrate? [Inc. 3]</td>
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NASA Space Place can also be found at http://science.nasa.gov/kids.
This storm cell photo was taken from NASA’s high-altitude ER-2 aircraft on May 23, 2014. The Integrated Precipitation and Hydrology Experiment, or IPHEx, field campaign is part of the ground validation effort for the Global Precipitation Measurement (GPM) mission, an international satellite mission led by NASA and the Japan Aerospace Exploration Agency.

Image Credit: NASA / Stu Broce

NASA and JAXA launched the Global Precipitation Measurement satellite in 2014. How will you build your own satellite?

/build-a-spacecraft

NASA Space Place can also be found at http://science.nasa.gov/kids.
A view from the ‘Kimberley’ formation on Mars taken by NASA’s Curiosity rover. The strata in the foreground dip towards the base of Mount Sharp, indicating the ancient depression that existed before the larger bulk of the mountain formed.

Image Credit: NASA/JPL-Caltech

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<td>On this calendar <strong>E</strong> means spaceplace.nasa.gov!</td>
<td>Dr. Seuss was born this day in 1904. If you like Dr. Seuss stories, you might like “Ode to Aerogel.” Spaceplace.nasa.gov</td>
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<td>First telephone call, 1876. How do we talk to spacecraft way out in space? <a href="http://casperspaceplace.com">http://casperspaceplace.com</a></td>
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<td>St. Patrick’s Day. Leprechauns are Irish folklore fairies in green. If we met green beings in space, what would we tell them about Earth? Voyager-to-stars.com</td>
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<td>International Goof-off Day. Download our Space Place games for your iPhone and iPad. You might learn something while goofing off!</td>
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<td>World Storytelling Day. Create your own zany story to tell today! Loopy-legends.com</td>
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<td>Vernal Equinox (Spring begins)</td>
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<td>Daylight Saving Time begins</td>
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<td>New Moon</td>
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In this image, taken by the Chandra X-ray Observatory and combined with a Hubble visible light image, an expanding shell of debris called SNR 0519-69.0 is left behind after a massive star exploded in the Large Magellanic Cloud, a satellite galaxy to the Milky Way.

Image Credit: NASA/CXC/SAO

APRIL 2017

Sunday Monday Tuesday Wednesday Thursday Friday Saturday

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Easter Sunday

Tell a Story Day. Read a couple of the storybooks on Space Place, then make up your own story about space!

Earth Day. Make a stained glass Earth and see our planet in a whole new light!


Leonardo da Vinci was born this day in 1452. Ever wonder how most inventors did their work?

National Find a Rainbow Day. Go to the “Cosmic Colors” viewer and see the universe in 16 more colors than in a rainbow!

Leonardo da Vinci was born this day in 1452. Ever wonder how most inventors did their work?

Jupiter will be closest to Earth. It’s a great day to play JunoQuest, a game about the giant planet.

April Fool’s Day. At least teach your nose not to be fooled!

National Read a Road Map Day. How do homing pigeons find their way home? Do they read a map?

Earth Day. Make a stained glass Earth and see our planet in a whole new light!

Tell a Story Day. Read a couple of the storybooks on Space Place, then make up your own story about space!

NASA Space Place can also be found at http://science.nasa.gov/kids.
NASA’s EPIC camera, aboard NOAA’s DSCOVR satellite, captured a unique view of this week’s solar eclipse. While residents of the Western Pacific looked up in the early morning hours to observe a total eclipse of the sun, DSCOVR looked on from a million miles away and captured the shadow of the Moon crossing the planet.

Image Credit: NASA DSCOVR EPIC team.
In July, 2013 the Interface Region Imaging Spectrograph (IRIS) mission released its first light imagery. Shown here is a fantastic image of an active region in great detail. The NASA mission is studying what is known as the interface region between the photosphere and corona.

Image Credit: NASA Iris

NASA Space Place can also be found at http://science.nasa.gov/kids.