

Earth Science on The Space Place

Earth Fun Quest

Instructions: Go to spaceplace.nasa.gov. For each “find” below, type into the Space Place Search field the word in **bold** letters. What you are looking for will be on the resulting menu, but may not be the only thing on the menu. When you find the item, **write in the answer or the title of the page or paste in the URL.**

Find a story that includes a **bird**. What is the bird doing?

Migrating: [Animals on the move](#)

Reading a map or flying home: [Bad \(space\) weather cancels pigeon races](#)

Sitting on a branch and/or singing or tweeting: [LISA mission gives humans a sixth sense](#)

Find a game in which you help to get rid of **greenhouse gases** in the air. Name one greenhouse gas.

Carbon dioxide, methane, ozone, water vapor: [Greenhouse Gas Attack](#)

Ozone: [Ozone Trap & Zap](#)

Play **Spuzzled**. What country in South America is suffering deforestation?

Bolivia: [Be Spuzzled](#)

Find something on The Space Place you can make with **candy**. What is it?

Greenhouse gas molecules: [Gummy Greenhouse Gases](#)

Find an article in which **dinosaurs** play a part.

[Thirsty? Have a comet!](#)

[Tails of Wonder](#)

[What hears a whisper a billion miles away?](#)

Find an adventure game about Earth's **wild weather**. What name did you pick for your ship?

Nimbus, Tornado, Hurricane, Blizzard, Cyclone, Stormy, Avalanche, Thunder, Aurora, Typhoon, Breeze, or Lightning: [Wild Weather Adventure](#)

Find a game about the **salt** in the ocean. What is the submarine trying to reach?

Key or treasure: [Go with the Flow](#)

Find an activity using modeling clay and **dental floss**. What would you be making?

Topo map: [Make a topographic map](#)

Find a flying **monster** with nine eyes. What is the name of the thing that is modeled in Lego bricks?

MISR, or Multi-angle Imaging SpectroRadiometer: [The many-eyed earth watcher](#)

Find a **walrus**. How many hairs does he have on top of his head?

Two, three or four are acceptable answers: [Animals on the move](#) or [Recipe for an Ecosphere](#)

Physical Science on The Space Place

Sun Fun Quest

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Find an article about what happens when the Sun **burps**. What beautiful thing can happen near Earth’s poles?

Northern or southern lights, or auroras: [Solar indigestion](#)

Find a game in which you must shield satellites against bad **space weather**. What’s the name of the satellite that warns that bad space weather is coming?

GOES-R: [Shields Up!](#)

Find an article about solar **eclipses**. What planet eclipsed the Sun in 2012?

[Venus](#)

Find an article about what causes **seasons** on Earth. Is Earth closer to the Sun in January or in July?

[January](#)

Find an article about a **violin**. Who made the violin and in what century?

Stradivari, 17th century: [A cool Sun for cool music](#)

Find an article about the Sun’s **mood** swings. About how often does the Sun’s magnetic field do a flip?

11 years: [What is the Sun’s mood today?](#)

Find the **Sun Gallery** and the image that compares the size of a sunspot to the size of Earth. Which is larger?

[Sunspot](#)

Find the rhyming story about a **superstar**. Which is bigger, our Sun (“Super Star”) or the star Rigel?

Rigel: [Super Star Meets the Plucky Planet](#)

Find the scientist on **Space Place Live** (cartoon talk show) who helped to catch the solar wind.

Don Burnett: [Space Place Live](#)

Find a picture in the **gallery of Sun** images of a figure 8 in the sky. What is the figure 8 called?

Analemma: [Gallery of Sun Images](#)

Physical Science on The Space Place

Solar System Fun Quest

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Find an activity that involves **cookies**. What do the cookies represent?

The Moon in [Make Moon cookies](#) and [The Moon's phases in Oreos](#), or

Stars in [Make colorful star cookies](#)

Find an article about a solar system object where it rains **methane** instead of water. What is this place?

Titan: [Planet X-treme Weather](#)

Find the game in which you try to avoid damaging radiation from **Jupiter**. What is the name of the mission going to Jupiter?

Juno: [JunoQuest](#)

Find the game in which big antennas listen carefully for **signals** from faraway spacecraft. How many places around the Earth are the antennas located?

Three: [DSN Uplink-Downlink](#)

Find the storybook about the scientist who wanted to take a dream trip to study **asteroids**. What is the scientist's name?

[Professor Starr](#)

Find a story about a cosmic **car crash**. What is the name of the comet that got crashed into?

[Comet Tempel 1](#)

In the Solar System **Gallery**, find an image of a planet (or dwarf planet) that also shows one or more of its moons. What is the name of the planet and its moon?

[Jupiter and Io](#)

[Jupiter and Ganymede](#)

[Saturn and Mimas](#)

[Pluto and Charon](#)

[Montage of Saturn and several moons](#)

In the People & Technology **Gallery**, find a picture of a man on the Moon. What is the man's name?

Buzz Aldrin: [Gallery of people and technology](#)

Find two activities on The Space Place (not counting classroom activities) that involve **food**. What are the foods?

[The Moon's phases in Oreos](#)

[Make Moon cookies](#)

[Make asteroid potatoes](#)

[Power up with tortillas](#)

[Make colorful star cookies](#)

[Get your gummy greenhouse gases](#)

[Whip up some El Niño Pudding](#)

Find an article about **ice** on another solar system body besides Earth. What's the name of the article or story?

[King of the Ice Dwarfs](#)

[I See Ice viewer](#)

[What's at the heart of a comet](#)

[Planet X-treme Weather](#)

[Quest for a Comet \(CometQuest game\)](#)

[What are we REALLY doing about Mars?](#)

[Annual Planet Awards \(storybook\)](#)

Physical Science on The Space Place

Space Fun Quest

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Find the game that uses colored balls to stand for **photons** (“particles” of light). What color are the balls that stand for visible light in this game?

Yellow: [Play Photon Pile-up](#)

Find a game and article about rescuing things from a **black hole**. What kind of force surrounds a black hole and makes it black?

Gravity: [Black Hole Rescue](#)

Find a **cat** as it would look in infrared light. Look at some of the pictures in the infrared photo album. Now, which parts of the cartoon cat are the coldest?

Paws, nose, ears, and tail: [See the Infrared Photo Album](#)

Find an article about sending a message to **aliens**. Name one of the spacecraft that carry the message.

Voyager 1 or 2: [Voyagers to the Stars](#)

Find the **paper folding** activity about stars. What is the name of the constellation that looks like a hunter?

Orion: [Make a Star Finder](#)

Find a game with **infrared slider** puzzles. Find the puzzles with a space object that looks like an eye. What is the name of the object?

Helix Nebula: [Slyder: The Infrared Universe](#)

In the **Space Gallery**, find the image of a nebula (a cloud of glowing gas) that looks a little like a figure 8. What is the name of this nebula?

Hourglass Nebula: [Gallery of space images](#)

In the **Space Gallery**, find an image that has more than 12 galaxies in the same image. What is the thumbnail title of the image?

Gravitational lensing or (Hubble) Distant Galaxies: [Gallery of space images](#)

In the **Space Gallery**, find three pictures of nebulas (glowing clouds of gas) named for animals (insects, birds, sea creatures, etc.). Name the nebulas.

Ant Nebula, Butterfly Nebula, Eagle Nebula, Cygnus Loop, Stringray Nebula, Cat's Eye Nebula: [Gallery of space images](#)

Find a story about a girl who longed to find an Earth-like **exoplanet** (a planet outside our solar system). What is the girl's name?

Lucy: [Lucy's Planet Hunt](#)

Physical Science on The Space Place

People and Technology Fun Quest

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Find a game in which you “**pilot**” a spacecraft. What is the spacecraft’s destination?

Jupiter: [JunoQuest](#)

Comet 67P/Comet Churyumov-Gerasimenko: [CometQuest](#)

Saturn: Cassini Commander (in [Solar System Explorer](#))

Earth: [Shield’s Up!](#)

Which astronomer interviewed on **Space Place Live!** (<http://spaceplace.nasa.gov/space-place-live/>) was inspired by the movie “Star Wars” to have a career in space.

[Michelle Thaller](#)

Find the name of an engineer on **Space Place Live.**

[Donya Douglas](#)

[Andre Dress](#)

Find names of two physicists who were guests on **Space Place Live.**

[Chris Martin](#)

[Kip Thorne](#)

[Karsten Danzmann](#)

[Deb Vane](#)

[Merav Opher](#)

Find a game with a **train**. What is the name of the train?

The A-train (constellation of satellites): [Missions to Planet Earth](#)

Find an activity for which you need a **balloon**. What's the balloon used for?

Powers the nanorover: [Make a balloon-powered Nanorover](#)

Picks up electrons, then pieces of paper, or becomes ionized: [Ions in Action](#)

Find a **dog** on The Space Place. What's he doing?

Just sitting: [The Land of the Magic Windows](#)

Just sitting, or looking at the sky: [Meteor Shower!](#)

Smelling a flower or wearing a space helmet: [Get Nosey!](#)

Find a story with a **helicopter**. In the story, what's the name of the person who broke his leg?

Roberto: [Technology saves the day!](#)

Find an article with a **superhero**. What is the superhero's name?

[Super Space Place Girl](#)

Find a page where you can drill a hole through a door using a **laser**. Name one other thing a laser is good for.

Bar codes, CD or DVD player, surgery, cutting, welding, etc. [What is a laser?](#)