

## Science Friday Space Activities

### **Bring The Artemis Mission Home With Hands-On Activities**

Grab some supplies and try these hands-on STEM activities right at home to celebrate the Artemis mission to the Moon. All ages

<https://www.sciencefriday.com/educational-resources/artemis-home-activities/>

### **Use Engineering To Design A Solar Space Probe**

Get hands-on as you use the engineering design process to build a solar space probe to investigate the Sun. All Ages

<https://www.sciencefriday.com/educational-resources/design-a-space-probe/>

### **Use Magnetic Fields To Understand Space Weather**

The interaction between the Sun's solar winds and the Earth's magnetic fields creates beautiful auroras. Learn why with hands-on experiments. All ages

<https://www.sciencefriday.com/educational-resources/magnetic-fields-space-weather/>

### **Gravity And Centripetal Force In Our Solar System**

Gravity, inertia, and centripetal force keep our solar system in motion. Explore with a series of kid-friendly gravity and force experiments. All ages

<https://www.sciencefriday.com/educational-resources/solar-system-gravity/>

### **Eclipse Party Activities**

Spice up your eclipse party with these hands-on activities—and learn a little something about our Sun, Moon, and Earth in the process. All ages

<https://www.sciencefriday.com/educational-resources/eclipse-party-activities/>

### **Splat! Model Lunar Impacts Using Water Balloons**

In this resource from International Observe the Moon Night, use water balloons to model how the moon's largest impact basins were created. Grades 3-5

<https://www.sciencefriday.com/educational-resources/splat-model-lunar-impacts-using-water-balloons/>

### **Go Out and Observe the Moon!**

Celebrate lunar science and moon exploration with STEAM investigations, simulations, and fun art activities. Grades 3-5

<https://www.sciencefriday.com/educational-resources/go-out-and-observe-the-moon/>

### **Scale Solar System Orbits—And Satellites!**

Use planetary orbits and scale ratios to draw scale solar system orbits while exploring gravitational forces. Grades 6-8

<https://www.sciencefriday.com/educational-resources/scale-solar-system-orbits-and-satellites/>

### **Design A Glove Fit For An Astronaut**

In this engineering design challenge, invent space gloves that will allow astronauts to collect samples on future missions to Mars. Grades 6-10

<https://www.sciencefriday.com/educational-resources/design-a-glove-fit-for-an-astronaut/>

### **Will Future Astronauts Need To Worry About Moonquakes?**

Analyze real evidence of seismic activity on the lunar surface to advise the next generation of crewed missions to the moon. Grades 6-10

<https://www.sciencefriday.com/educational-resources/future-astronauts-moonquakes/>

### **What Causes Some Aurora To Appear In Discrete Lines?**

Why do some auroras appear in discrete lines, while others fill the sky with diffuse light? Explore how electrons surf on Alfvén waves. Grades 9-12

<https://www.sciencefriday.com/educational-resources/some-aurora-appear-in-discrete-lines/>

### **Model Eclipses**

Model solar and lunar eclipses by making your own physical, proportional representations of the Earth and Moon. Grades 6-12

<https://www.sciencefriday.com/educational-resources/model-eclipses/>

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Coming October 4, 2024!

### **Down To Earth: Space Science For Community Change**

Science Friday is partnering with the ISS National Laboratory to launch a free month-long program and ignite a curiosity for science that'll burn brighter than a rocket booster. Use innovation from the International Space Station to solve real-world environmental challenges in your community. What cutting-edge innovation from space can you harness to transform your community? Learn more at

[ScienceFriday.com/DownToEarth](https://www.sciencefriday.com/DownToEarth).

