National Aeronautics and Space Administration

**MOON** | FOR THE BENEFIT OF HUMANITY

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# MOON
## FOR THE BENEFIT OF HUMANITY

### Artemis is Humanity's 21st Century Return to the Moon

Through Artemis, NASA will land the first woman and first person of color on the Moon and set up science and exploration capabilities nearly a quarter million miles away from our home planet. Through innovative technology and commercial and international partnerships, we will establish a long-term presence on the Moon and launch a series of missions to explore the lunar surface. What we learn on the Moon, starting at the lunar South Pole, will lead us to our next giant leap: human exploration to Mars and other potential destinations in the solar system.

### Lunar Community

We are going together. Exploration of the Moon is a shared effort, and NASA is joining forces with an array of partners – from American companies and universities to other nation's space agencies – for the greater good of humanity.

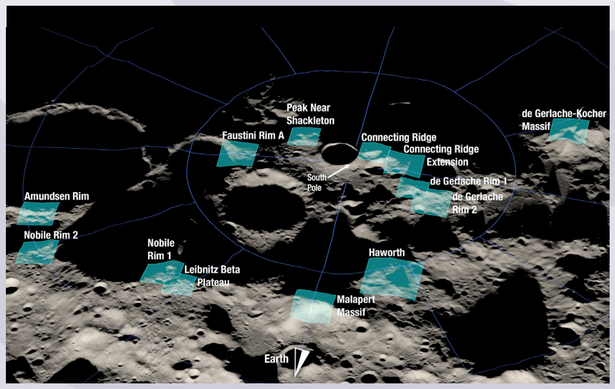
NASA's Orion spacecraft completed its uncrewed Artemis I flight test in 2022, paving the way for future crewed missions to the Moon and beyond. During the flight, Orion launched atop the Space Launch System rocket; flew by the Moon twice (coming within 80 miles of the lunar surface); and, at its farthest distance, traveled a record-breaking 268,563 miles from our home planet before returning to Earth. The nearly month-long mission provided valuable data on the performance of the spacecraft's critical systems and equipment before astronauts fly aboard beginning with Artemis II.

The mission, however, would not have been possible without the work of a worldwide team encompassing all 50 U.S. states and 10 European nations. Thousands of individuals were instrumental to its success, and many thousands more will be cheering for Artemis as future missions light the way forward to other worlds. Learn more: ***https://www.nasa.gov/specials/artemis***

### Lunar Science

The central goal is to reveal the history of major events and processes that have shaped the Earth–Moon system and the solar system. Robots and astronauts will be able to uncover the lunar record of solar system origin and early history, and understand the geologic processes that shaped the early Earth, which are best preserved on the Moon. Artemis is going beyond the Apollo Program's excursions at the lunar equator to landing sites near the South Pole, where forbidding terrain and new challenges await. Previous robotic missions have shown that volatiles (such as water ice) are trapped in permanently shadowed regions near the lunar poles, and discoveries during Artemis missions could reveal the origin, composition, amounts, and distribution of the Moon's volatiles and how they may be used for future exploration.

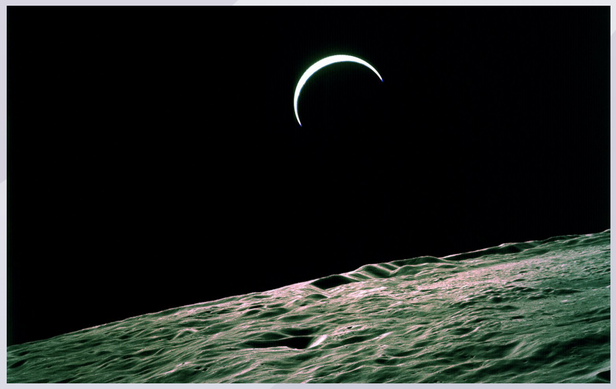
Orion sees the Earth rise on day 20 of Artemis I after performing the return-powered flyby on Dec. 6, 2022. Credits: NASA. ***https://go.nasa.gov/3KzDvyp***




Shown here is a rendering of 13 candidate landing regions for Artemis III. Each region is approximately 9.3 by 9.3 miles (15 by 15 kilometers). Credits: NASA. ***https://go.nasa.gov/3dJIH5V***

On April 3, 2023, NASA named the crew for Artemis II, with NASA astronauts Christina Koch, Victor Glover, Reid Wiseman, and Canadian Space Agency astronaut Jeremy Hansen. Credits: NASA/Josh Valcarcel. ***https://go.nasa.gov/41plERc***

Local school children cheer on the newly named Artemis II astronauts at the crew announcement event in Houston. Credits: NASA/Robert Markowitz. ***https://go.nasa.gov/3o8UXCb***



This view of the crescent Earth over the Moon's horizon was taken during the Apollo 15 lunar landing mission. Apollo 15 launched on July 26, 1971. Credits: NASA. ***https://go.nasa.gov/41490HC***

Water is a critical resource for long-term human exploration of space and a compelling reason for NASA to send astronauts to the Moon's South Pole. Water discovered and harvested there could be used for breathing, drinking, and making rocket fuel. Lunar science will help further develop a blueprint for humans to explore Mars and other cosmic destinations. Learn more: ***https://go.nasa.gov/3UxzizR***

### Lunar Inspiration

NASA's Office of STEM Engagement is on its own special mission to engage with the Artemis Generation – the young people who will be the future of human space exploration and the first to set foot on Martian soil.

NASA is committed to reducing the barriers to participation in science, technology, engineering, and math, creating ample opportunities for students to spark and sustain an interest in what have been historically challenging subjects. Artemis, specifically, is fueling a desire for college and graduate students to seek meaningful and rewarding STEM careers. One obvious perk is becoming part of the team that will land humans on the Moon – this time to stay. Students eager to be a part of this nation's next big moment should check for ongoing opportunities at ***https://www.nasa.gov/stem*** and ***intern.nasa.gov***.

### The Moon: For the Benefit of Humanity

NASA's exploration vision is anchored in providing value for humanity by answering what is important to them, with the lunar South Pole as the first stop on a years-long journey that aims to expand human presence farther into the solar system.

**We're off to the Moon and would love for you to come along.**
**Won't you come aboard?**