

Mission Artemis – flight around the Moon

🌙 Artemis and Orion: A New Chapter in Human Space Exploration



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Based on the source: [The Latest: Artemis II astronauts reach orbit on historic mission to the moon and back | Newser](#)

NASA's Artemis program represents the beginning of a new era in human space exploration. After more than five decades without human missions beyond low Earth orbit, the United States is preparing to return astronauts to the Moon and eventually travel even farther into deep space. Artemis is not only a scientific project; it is also a technological, political, and symbolic effort to show that long-distance human spaceflight is possible again.

At the center of this program is the Orion spacecraft, a modern capsule designed to carry astronauts safely on long missions far from Earth. Orion is equipped with advanced navigation systems, strong heat shields, and life-support technology that can keep a crew alive for several weeks. Although the inside of the capsule is relatively small, it is carefully designed to allow astronauts to work, sleep, and conduct experiments during their journey.

The first major step of the program was Artemis I, launched in 2022. This mission did not carry astronauts, but it was extremely important. Orion traveled around the Moon, reached a record distance from Earth, and then returned safely. The mission proved that both the spacecraft and the powerful Space Launch System (SLS) rocket could operate correctly under real space conditions.

The next mission, Artemis II, is the first crewed flight of the program. Four astronauts are travelling around the Moon on a journey lasting about ten days. They will not land on the lunar surface, but they will test all systems needed for future landings. This mission is historically significant because the crew includes the first woman, the first person of color, and the first Canadian astronaut to travel toward the Moon. Their participation shows NASA's commitment to diversity and international cooperation.

Future missions, such as Artemis III and Artemis IV, aim to land astronauts on the Moon again and begin building a long-term presence there. NASA plans to construct a small space station called the Lunar Gateway, which will orbit the Moon and serve as a base for scientific research and future missions to Mars. The agency also hopes to develop a sustainable lunar base where astronauts can live and work for longer periods.

Overall, the Artemis program is more than a return to the Moon. It is a long-term strategy to expand human activity into deep space, test new technologies, and inspire a new generation of scientists, engineers, and explorers.

Vocabulary:

Era - a long and important period of history

Example: *The Artemis program begins a new era in space exploration.*

Orbit - the curved path a spacecraft or planet follows around another body

Example: *Orion will travel into lunar orbit before returning to Earth.*

Capsule - a small spacecraft where astronauts live and work

Example: *The Orion capsule is designed for long journeys in deep space.*

Advanced - modern and highly developed

Example: *Orion uses advanced technology to keep astronauts safe.*

Mission - an important task or journey, especially in space

Example: *Artemis I was an uncrewed mission that tested the spacecraft.*

Record (noun) - the best or highest level ever reached

Example: *Orion traveled a record distance from Earth.*

Surface - the outside or top layer of something

Example: *Future missions aim to land astronauts on the Moon's surface.*

Cooperation - working together with others

Example: *The Artemis program includes international cooperation.*

Strategy - a long-term plan to achieve a goal

Example: *Artemis is part of NASA's strategy to explore deep space.*

Gap-filling exercise

Complete the text with the correct words from the box. There are **more words than you need**.

Word bank: *era • capsule • mission • surface • technology • prepare • presence • advanced • launch • cooperation • record • strategy • future • orbit*

NASA's Artemis program marks the beginning of a new _____ (1) in human space exploration. After many years without astronauts traveling beyond low Earth _____ (2), the United States is working to _____ (3) for a return to the Moon. A central part of this effort is the Orion _____ (4), which contains _____ (5) systems that can support astronauts on long journeys.

The first major _____ (6), Artemis I, reached a _____ (7) distance from Earth and proved that the spacecraft and rocket were ready for future flights. The next step, Artemis II, will send a crew around the Moon and demonstrate how Orion functions with people on board.

Later missions aim to land astronauts on the lunar _____ (8) again and build a long-term human _____ (9) there. NASA also plans to create a small station in lunar orbit, which will support international _____ (10) and help develop a long-term _____ (11) for exploring deep space.

Examples of past perfect tense:

1. Before Artemis began, NASA **had spent** more than fifty years without sending astronauts beyond low Earth orbit.
2. Engineers improved its systems after they **had tested** earlier prototypes and identified what needed to be changed.
3. By the time Orion was ready for flight, NASA **had developed** advanced life-support and safety technologies to protect astronauts.
4. The success of Artemis I confirmed that NASA **had prepared** the program carefully and was ready for the next phase.