

ARTEMIS I

The First Uncrewed Integrated Flight Test of NASA's Orion Spacecraft and Space launch System Rocket

1 LAUNCH (11/16/22) SLS and Orion lift off from pad 39B at Kennedy Space Center.

2 JETTISON ROCKET BOOSTERS, FAIRINGS, AND LAUNCH ABORT SYSTEM

3 CORE STAGE MAIN ENGINE CUT OFF With separation.

4 PERIGEE RAISE MANEUVER

5 EARTH ORBIT Systems check with solar panel adjustments.

6 TRANS LUNAR INJECTION (TLI) BURN Maneuver lasts for approximately 20 minutes.

7 INTERIM CRYOGENIC PROPULSION STAGE (ICPS) SEPARATION AND DISPOSAL ICPS commits Orion to Moon at TLI.

8 OUTBOUND TRAJECTORY CORRECTION BURNS As necessary adjust trajectory for lunar flyby to Distant Retrograde Orbit (DRO).

9 OUTBOUND POWERED FLYBY 105.5 miles from the Moon; targets DRO insertion.

10 LUNAR ORBIT INSERTION Enter Distant Retrograde Orbit.

11 DISTANT RETROGRADE ORBIT Perform a half revolution (6 day duration) in the orbit 43,730 miles from the surface of the Moon.

12 DRO DEPARTURE Leave DRO and start return to Earth.

13 RETURN POWERED FLYBY RPF burn prep and return coast to Earth initiated. Closest approach in middle of burn, 81 miles.

14 RETURN TRANSIT Return Trajectory Correction burns as necessary to aim for Earth's atmosphere.

15 CREW MODULE SEPARATION FROM SERVICE MODULE

16 ENTRY INTERFACE Enter Earth's atmosphere.

17 SPLASHDOWN (12/11/22) Pacific Ocean landing within view of the U.S. Navy recovery ship.



Why the Moon?

Artemis I Launches to the Moon

Mission Path Overview

Ride Along with NASA

Artemis I Farther & Faster

The Artemis I mission lasted just over 25 days. The Orion Spacecraft traveled 1.4 million miles and when it re-entered the Earth's atmosphere it reached speeds up to 24,581 mph! The mission concluded with Splashdown in the Pacific Ocean on Dec. 11, 2022.



Artemis I Launch Date

NOVEMBER 16, 2022



NASA STEM Resources

NASA's Artemis mission will land the first woman and first person of color on the Moon! Using new technologies, NASA will explore regions of the Moon never visited before and establish a long-term human presence on the Moon.

Get involved by experiencing these NASA STEM Resources and Join Artemis!

<https://stem.nasa.gov/artemis/>

BUILD IT



Space Launch
System: Block 1
Activity



First Woman
Camp Experience
Activities



Artemis Camp
Experience
Activities

READ IT



You Are Going



First Woman
Graphic Novels



Moonkin, Campos
& Friends Comics

RESEARCH IT



All About the
Moon



I Am Artemis



Artemis I STEM
Learning Pathway