

EU Space Milestones: Artemis II, Reusable Spacecraft, and Satellite Launches

Space Exploration · Answer Key · 10 Questions

1. What critical component, developed by the European Space Agency (ESA), played a vital role in NASA's Artemis II mission to the Moon?

- A) The Solar Orbiter
- B) The European Service Module (ESM)**
- C) The Euclid Telescope
- D) The Vega Rocket

2. What is the primary goal of ESA's Space Rider program?

- A) To establish a permanent human research station on the Moon
- B) To launch a new mission to Venus
- C) To develop Europe's first reusable spacecraft for orbital missions**
- D) To deploy a constellation of new navigation satellites

3. In November 2025, the Copernicus Sentinel-1D satellite was launched to maintain which crucial system?

- A) Europe's deep space communication network
- B) Europe's advanced radar-based Earth observation system**
- C) Europe's solar system exploration capabilities
- D) Europe's asteroid detection network

4. Which European satellite program, a flagship component of the EU Space Programme, aims to provide global navigation and timing services?

- A) Copernicus
- B) Solar Orbiter
- C) Galileo**
- D) EUMETSAT

5. What significant event occurred in April 2026 related to human spaceflight and Europe's involvement?

- A) The first European-led mission to Mars
- B) The launch of the Artemis II mission with Europe's vital contribution**
- C) The completion of the International Space Station's new module
- D) The first successful test flight of a European reusable rocket

6. Which European mission, launched in July 2023, is focused on studying dark matter and dark energy?

- A) PLATO
- B) ARIEL
- C) EnVision
- D) Euclid**

7. What key role does the European Service Module (ESM) play for NASA's Orion spacecraft during the Artemis missions?

- A) It provides the primary power for the Orion's communication systems.
- B) It serves as the habitat for the astronauts during deep space travel.
- C) It provides propulsion, power, and life support for the spacecraft.**
- D) It is responsible for collecting scientific data from the lunar surface.

8. In December 2025, a pair of Galileo satellites were launched using which European heavy-lift launcher?

- A) Vega C
- B) Ariane 5
- C) Ariane 6**
- D) Soyuz

9. What is a long-term goal for ESA regarding the Moon, as mentioned by their Director of Human and Robotic Exploration?

- A) To launch a probe to study the Moon's core
- B) To establish a permanent European research station on the Moon**
- C) To mine lunar resources for use on Earth
- D) To deploy a telescope on the Moon's far side

10. What capability is being tested by the CubeSats launched for Greece's Hellenic Space Dawn mission in May 2026?

- A) Asteroid detection
- B) Satellite-based wildfire tracking
- C) Satellite links and optical data transmission**
- D) Monitoring atmospheric pollution