

US Science Spotlight: NASA's Artemis III Plans, Critical Minerals, and Heart Health

Science · Practice Test · 10 Questions

1. What is a primary focus of NASA's preliminary plans for the Artemis III mission, as revealed in May 2026?

- A) Landing astronauts on the Moon's South Pole
- B) Testing rendezvous and docking capabilities in Earth orbit with commercial landers
- C) Establishing a permanent lunar base
- D) Conducting long-duration missions to Mars

2. The U.S. Department of Energy's Office of Critical Minerals and Energy Innovation announced \$52 million in funding to support projects in which area?

- A) Renewable energy storage solutions
- B) The development of advanced AI for climate modeling
- C) Revitalizing domestic manufacturing and supporting onshore industrial excellence
- D) Improving cybersecurity for energy grids

3. Recent research supported by the National Institutes of Health (NIH) has identified a new model for predicting outcomes in which chronic heart condition?

- A) Coronary Artery Disease
- B) Atrial Fibrillation
- C) Hypertrophic Cardiomyopathy (HCM)
- D) Congestive Heart Failure

4. The U.S. Geological Survey (USGS) and NASA have collaborated on a hyperspectral survey to map what critical resources in the American West?

- A) Water reserves and underground aquifers
- B) Rare earth elements and other critical minerals
- C) Geothermal energy potential
- D) Unconventional oil and natural gas deposits

5. The National Science Foundation (NSF) announced a significant investment in the 'NSF X-Labs' initiative. What is the primary goal of this initiative?

- A) To fund traditional university research projects
- B) To support independent, milestone-driven research partnerships for breakthrough science
- C) To provide scholarships for undergraduate STEM students
- D) To develop new curriculum for K-12 science education

6. According to recent NOAA climate outlooks, what is the likelihood of El Niño emerging soon and continuing through the Northern Hemisphere winter of 2026-2027?

- A) A low probability, less than 20%
- B) A moderate probability, around 50%
- C) A high probability, 82% chance of emerging and 96% chance of continuing
- D) El Niño is not expected to emerge

7. A recent study involving the Smithsonian Institution explored the genetic history of which early American settlement?

- A) Jamestown, Virginia
- B) Plymouth Colony, Massachusetts
- C) St. Mary's City, Maryland
- D) Santa Fe, New Mexico

8. Which U.S. Department of Energy (DOE) office announced \$52 million for projects to enhance the competitiveness of American industry and support domestic manufacturing?

- A) Office of Fossil Energy and Carbon Management
- B) Office of Nuclear Energy
- C) Office of Energy Efficiency and Renewable Energy
- D) Office of Critical Minerals and Energy Innovation

9. The NSF X-Labs initiative, with up to \$1.5 billion in investment over the next decade, is seeking proposals in which two initial topic areas?

- A) Renewable Energy and Climate Change
- B) Artificial Intelligence and Machine Learning
- C) Scientific Instrumentation for Sensing and Imaging, and Quantum Systems
- D) Biotechnology and Genetic Engineering

10. NASA's Artemis III mission, while testing rendezvous and docking in Earth orbit, will also test an upgraded component designed to enable what for future missions?

- A) More efficient fuel systems
- B) Robust reentry profiles for the Orion spacecraft
- C) Improved communication systems
- D) Longer life support capabilities