



First Moon Mission: Groundbreaking Discovery

Description

One of the most frequently asked questions I receive when showcasing the Moon to the public is, "Can you see the flag left by astronauts there?"

This often leads to a conversation about the distance to the Moon compared to the challenge of spotting a 1.5 by 0.9 meter flag from such a distance. While my telescope is good, it's not that good.

During the US Apollo program, six manned missions successfully landed on the Moon, starting with Apollo 11 in 1969, each leaving a flag. China has recently announced that another flag will be added to the collection in late 2026, as Chang'e 7 embarks on a lunar mission.

Flying a Flag on the Moon

The intriguing news originates from the Deep Space Exploration Laboratory (DSEL) via the China Media Group. The new flag planned for the Moon will be designed to appear as if it is 'flapping' on the airless lunar surface.

This innovative concept was suggested by elementary school students from Changsha in China's Hunan Province. The flag will feature closed-loop wires embedded in the fabric, utilizing magnetic currents and electromagnetic interactions to create a waving effect.

"This project aims to deepen young students' comprehension of China's space program and spark their interest in pursuing space exploration in the future," stated Zhang Tianzhu from DSEL/Institute of Technology in a recent [press release](#).

A Race to the (Lunar) Pole

[Chang'e 7](#) is also intended for scientific exploration, planning to land near Shackleton Crater's edge within the Moon's south polar region.

The crater's permanently shadowed floor is of particular interest due to the suspected presence of water ice. Additionally, the mission will carry six instruments from six nations, including a rover and observatory from the [International Lunar Observatory Association](#) based in Hawai'i.

Shackleton Crater was previously considered as a landing site for NASA's now [scrapped VIPER rover](#).

While the significance of a flag 'flapping' in space may be limited, it promises to be an engaging form of public outreach for the China National Space Administration (CNSA). Notably, some visuals depict a CNSA logo (rather than the Chinese national flag) standing independently on a tall pole, indicating some meticulous planning will be required to implant it in the lunar soil.

China in Space 2025

The upcoming years are bustling with activities for China's space agency. The launch of its inaugural asteroid and comet sample return mission, Tianwen-2, is slated for this May, with destinations including asteroid Kamo' oalewa, believed to be a Moon fragment, and Comet 311P/PanSTARRS.

Furthermore, China is preparing for the launch of its own space telescope, Xuntian, in early 2026. This telescope will orbit synchronously with the manned Tiangong space station, facilitating maintenance and upgrades.

Placing [flags in space](#) and on the Moon is not a new phenomenon, typically involving mounting flags on spacecraft. For instance, the US flag on NASA's New Horizons probe is voyaging beyond the Solar System, potentially outlasting the US and our species.

It is likely that US flags left by Apollo astronauts on the Moon have faded to white due to intense ultraviolet rays. Nonetheless, imagery from NASA's [Lunar Reconnaissance Orbiter](#) indicates that a few flags remain standing.

The honor of placing the first symbol on the lunar surface goes to [Luna 2](#), the initial spacecraft to impact the Moon in 1959, carrying a pennant of the now dissolved Soviet Union:

Observing a flag 'flapping' on the Moon's surface next year will undoubtedly be a memorable moment, possibly even evolving into an internet meme.

This content was originally featured on [Universe Today](#). Explore the [original article](#).

Vocabulary List:

1. **Innovative** /'ɪnə,veɪtɪv/ (adjective): Featuring new methods; advanced and original.
2. **Exploration** /ɪk,splɔ:reɪʃən/ (noun): The action of traveling in or through an unfamiliar area in order to learn about it.
3. **Significance** /sɪg'nɪfɪkəns/ (noun): The quality of being worthy of attention; importance.
4. **Missions** /'mɪʃənz/ (noun): Important assignments carried out for a specific purpose.
5. **Embarks** /ɪm'bɑ:rk/ (verb): To begin (a journey or enterprise).
6. **Integrate** /'ɪntɪgrɪteɪt/ (verb): To combine one thing with another to form a whole.

Comprehension Questions

Multiple Choice

1. Which mission landed on the Moon first among the US Apollo program?

- Option: Apollo 7
- Option: Apollo 11
- Option: Apollo 13
- Option: Apollo 15

2. Where is the upcoming flag "flapping" mission planned for in late 2026?

- Option: Mars
- Option: The Moon
- Option: Jupiter
- Option: Saturn

3. What innovative concept will be used to create a waving effect on the new Moon flag?

- Option: Closed-loop wires
- Option: Solar power
- Option: Wind energy
- Option: Hydraulic systems

4. Where is the International Lunar Observatory Association based?

- Option: Australia
- Option: Canada
- Option: Hawai'i
- Option: Germany

5. Which spacecraft was the initial one to impact the Moon in 1959?

- Option: Apollo 11
- Option: New Horizons
- Option: Chang'e 7
- Option: Luna 2

6. What is the suspected presence of in Shackleton Crater, making it of particular interest?

- Option: Diamonds
- Option: Water ice
- Option: Alien life forms
- Option: Gold

True-False

7. China is planning a lunar mission with the Chang'e 7 spacecraft in late 2026.
8. The US flags left by Apollo astronauts on the Moon have all faded to white.
9. The US flag on NASA's New Horizons probe is currently in the Solar System.
10. The China National Space Administration (CNSA) plans to use the Chinese national flag on the Moon.
11. The upcoming Tianwen-2 mission includes destinations to study Comet 311P/PanSTARRS.
12. The Luna 2 spacecraft carried a pennant of the Soviet Union during its Moon impact.

Gap-Fill

13. Shackleton Crater was previously considered as a landing site for NASA's now _____ VIPER rover.
14. The upcoming space telescope Xuntian is planned to be launched by China in early _____.
15. China's Chang'e 7 spacecraft is intended for scientific exploration near Shackleton Crater within the Moon's south polar region in late _____.
16. The US Apollo program had a total of _____ manned missions that successfully landed on the Moon.
17. Some visuals depict the CNSA logo standing independently on a tall pole on the Moon, requiring meticulous planning for its _____.
18. The new Moon flag is designed to appear as if it is 'flapping' on the airless lunar surface using magnetic _____.

currents and _____ interactions.

Answer

Multiple Choice: 1. Apollo 11 2. The Moon 3. Closed-loop wires 4. Hawai'i 5. Luna 2 6. Water ice

True-False: 7. True 8. False 9. True 10. False 11. True 12. True

Gap-Fill: 13. scrapped 14. 2026 16. six 17. implantation 18. electromagnetic

Vocabulary quizzes

Multiple Choice (Select the Correct answer for each question.)

1. Which term describes the introduction of new ideas methods or technologies?

- Option: Innovative
- Option: Missions
- Option: Significance
- Option: Vascular

2. What word describes the indications or characteristics of a physical or mental condition?

- Option: Embarks
- Option: Mitigate
- Option: Symptoms
- Option: Dynamics

3. Which field encompasses the atmosphere and outer space?

- Option: Compete
- Option: Aerospace
- Option: Establish
- Option: Determined

4. What term describes the ability to recover quickly from difficulties or challenges?

- Option: Pivotal
- Option: Resilience
- Option: Excessive
- Option: Syndrome

5. Which word means important notable or having a major impact?

- Option: Integrate
- Option: Vascular

Option: Syndrome

Option: Significant

6. What term describes something that is essential or decisive?

Option: Mitigate

Option: Cosmic

Option: Crucial

Option: Vascular

7. Which word is related to the universe on a vast scale?

Option: Dust

Option: Facilitating

Option: Astrophysical

Option: Cosmic

8. What term means to make less severe serious or painful?

Option: Binaries

Option: Mitigate

Option: Excessive

Option: Dynamics

9. Which term relates to making easier or helping progress?

Option: Mitigate

Option: Dynamics

Option: Facilitating

Option: Establish

10. What term relates to blood vessels or circulatory system?

Option: Binaries

Option: Cerebral

Option: Vascular

Option: Dynamic

Gap-Fill (Fill in the blanks with the correct word from the vocabulary list.)

11. The team _____ on a challenging journey to explore new territories.

12. She was _____ to succeed in her project despite the obstacles.

13. It is important to use _____ language in a professional setting.

14. The CEO made a _____ decision that shaped the future of the company.

15. Too much sugar consumption can lead to _____ weight gain.

16. The movie had an _____ plot that kept the audience guessing until the end.

17. The company aims to _____ a strong presence in the global market.

18. Athletes train hard to _____ in international competitions.

19. The Northern Lights are a natural _____ that amazes observers.

20. Space agencies plan _____ to explore distant planets.

Matching Sentences (Match each definition to the correct word from the vocabulary list.)

21. The scientist provided valuable _____ into the behavior of the newly discovered species.

22. Computer systems operate using a series of zeros and ones known as _____.

23. The report the key features of the latest software update.

24. Detectives are skilled at solving complex _____ in crime novels.

25. The political of the region have shifted dramatically in recent years.

26. The doctor explained the symptoms of the rare _____ to the patient.

27. Planting trees helps to the effects of climate change.

28. Astrophysicists study the origins of the universe.

29. Scientists the depths of the ocean to discover new species.

30. The findings of the research had a impact on the medical field.

Answer

Multiple Choice: 1. Innovative 2. Symptoms 3. Aerospace 4. Resilience 5. Significant 6. Crucial 7. Cosmic
8. Mitigate 9. Facilitating 10. Vascular

Gap-Fill: 11. embarks 12. determined 13. appropriate 14. pivotal 15. excessive 16. intriguing 17. establish
18. compete



19. phenomenon 20. missions

Matching sentence: 1. insight 2. binaries 3. characterized 4. mysteries 5. dynamics 6. syndrome 7. mitigate
8. cosmic 9. explore 10. significant

CATEGORY

1. Health - LEVEL5

Date Created

2025/01/23

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