



NASA's Psyche Spacecraft Offers New Perspectives on Asteroid

Description

NASA's Psyche spacecraft flew close to Mars on May 15, 2026. It took many pictures during its visit. The spacecraft came from the side of Mars that faces away from the Sun. This made Mars look like a thin crescent.

The images showed the thin atmosphere of Mars. Sunlight shone through clouds of dust above the planet's surface. Jim Bell from Arizona State University said the cameras took thousands of images. These pictures will help scientists understand how the cameras work.

Psyche's magnetometer detected solar wind effects in Mars' atmosphere. Its spectrometers measured the chemical makeup of the Martian surface below.

Other missions are looking at Mars all the time. This means there may not be big new discoveries from Psyche. However, scientists can compare Psyche's data with information from other missions.

The Psyche mission will focus on an asteroid named Psyche in three years. This asteroid is rich in metals like iron and nickel. The spacecraft will study it for a long time, much longer than its quick visit to Mars.

Vocabulary List:

1. **spacecraft** //ˈspeɪs,kɹæft// (noun): a vehicle designed to travel in space
2. **atmosphere** //ˈæt məs fɪr// (noun): the layer of air around a planet
3. **crescent** //ˈkrɛs ənt// (noun): a thin curved shape like part of a circle
4. **magnetometer** //,mæɡnəˈtə mɪ tər// (noun): a tool that measures magnetic fields
5. **spectrometers** //spekˈtrə mət ərz// (noun): devices that measure light to find chemicals
6. **asteroid** //ˈæst ə rɔɪ d// (noun): a small rocky object that orbits the Sun

Comprehension Questions

Multiple Choice

1. On what date did NASA's Psyche spacecraft fly close to Mars?

Option: May 15, 2026



Option: April 10, 2026

Option: June 22, 2026

Option: July 30, 2026

2. What did the spacecraft's cameras capture during its visit to Mars?

Option: Only the surface

Option: Thousands of images

Option: Just one image

Option: No images

3. What is the primary focus of the Psyche mission?

Option: Mars exploration

Option: Studying the Moon

Option: An asteroid named Psyche

Option: The Sun

4. What elements are the asteroid Psyche rich in?

Option: Gold and silver

Option: Iron and nickel

Option: Copper and zinc

Option: Aluminum and titanium

5. What type of instruments did Psyche use to measure Mars' atmosphere?

Option: Cameras and radars

Option: Magnetometers and spectrometers

Option: Lasers and sonar

Option: Telescopes and sensors

6. How long is the spacecraft's study of the asteroid Psyche planned to last?

Option: A few days

Option: A few months

Option: A long time

Option: Only two weeks

True-False

7. The Psyche spacecraft flew close to Mars on May 15, 2025.



8. The images taken by Psyche showed a thick atmosphere on Mars.
9. Mars appears as a thin crescent when viewed from the side that faces away from the Sun.
10. Jim Bell is associated with NASA and commented on the images taken by Psyche.
11. Psyche's mission will focus solely on Mars exploration.
12. The asteroid Psyche is primarily composed of metals.

Gap-Fill

13. The Psyche spacecraft flew close to Mars on May 15, _____ .
14. Jim Bell from Arizona State University said the cameras took _____ images.
15. Psyche's magnetometer detected solar wind effects in Mars' _____ .
16. Scientists can compare Psyche's data with information from _____ missions.
17. The asteroid Psyche is rich in metals like iron and _____ .
18. The spacecraft will study the asteroid for a long time, much longer than its quick _____ to Mars.

Answer

Multiple Choice: 1. May 15, 2026 2. Thousands of images 3. An asteroid named Psyche 4. Iron and nickel 5. Magnetometers and spectrometers 6. A long time

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

Gap-Fill: 13. 2026 14. thousands of 15. atmosphere 16. other 17. nickel 18. visit

Vocabulary quizzes

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



-
1. What has significantly changed due to global warming?
 - Option: Population growth
 - Option: Climate
 - Option: Industrialization
 - Option: Urbanization

 2. What is a consequence of rising temperatures in polar regions?
 - Option: Flooding
 - Option: Melting glaciers
 - Option: Increased biodiversity
 - Option: Improved agricultural yield

 3. What does gravity primarily affect?
 - Option: Light speed
 - Option: Spacecraft navigation
 - Option: The movement of water
 - Option: The falling of objects

 4. What is a fraudulent scheme designed to deceive people?
 - Option: Purchase
 - Option: Scam
 - Option: Gain
 - Option: Investment

 5. What field applies scientific and mathematical principles to design structures?
 - Option: Architecture
 - Option: Biology
 - Option: Engineering
 - Option: Economics

 6. How many milliseconds are in one second?
 - Option: 100
 - Option: 1,000
 - Option: 10,000
 - Option: 100,000

 7. What surrounds the Earth and contains gases necessary for life?
 - Option: Lithosphere
 - Option: Hydrosphere
 - Option: Atmosphere
 - Option: Cryosphere



8. Who creates audio content for an online audience?

- Option: Blogger
- Option: Podcaster
- Option: Vlogger
- Option: Author

9. What term is used for conclusions drawn from research?

- Option: Assumptions
- Option: Findings
- Option: Hypotheses
- Option: Predictions

10. What term refers to vehicles designed for travel in outer space?

- Option: Aircraft
- Option: Spacecraft
- Option: Submarines
- Option: Drones

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

11. The force of _____ affects all objects with mass.

12. Due to climate change, many _____ are melting at an alarming rate.

13. Many people fell victim to the online _____ that promised quick profits.

14. It may take years for ecosystems to _____ from natural disasters.

15. Civil _____ projects require careful planning and execution.

16. NASA constantly monitors for threats posed by _____ in space.

17. Before making a large _____, it is wise to compare options.

18. Scientists use _____ to analyze the light spectrum of distant stars.

19. A _____ is one-thousandth of a second.

20. The Earth's _____ is composed of several layers of gases.



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

21. The force of gravity keeps the planets in orbit around the sun.
22. The scam promised unrealistic returns on investment, attracting many unsuspecting people.
23. The melting of ice caps poses a significant risk to coastal cities worldwide.
24. Engineering plays a crucial role in developing sustainable technologies for the future.
25. Retreating glaciers are indicators of climate change and environmental shifts.
26. A popular podcaster discusses various topics related to technology and society.
27. Spectrometers are essential tools for analyzing the composition of distant celestial bodies.
28. In computational technology, response time is often measured in milliseconds.
29. The research team's findings were published in a reputable scientific journal.
30. The atmosphere is crucial for protecting life on Earth from harmful solar radiation.

Answer

Multiple Choice: 1. Climate 2. Melting glaciers 3. The falling of objects 4. Scam 5. Engineering 6. 1,000
7. Atmosphere 8. Podcaster 9. Findings 10. Spacecraft

Gap-Fill: 11. gravity 12. glaciers 13. scam 14. recover 15. engineering 16. asteroids 17. purchase
18. spectrometers 19. millisecond 20. atmosphere

Matching sentence: 1. gravity 2. scam 3. melting 4. engineering 5. glaciers 6. podcaster 7. spectrometers
8. millisecond 9. findings 10. atmosphere

CATEGORY

- 1. Sci/Tech - LEVEL1

POST TAG

- 1. ESL learning
- 2. esl news
- 3. familiar world
- 4. Level 1
- 5. NASA
- 6. Psyche



7. reading level
8. spacecraft

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