



Scientists Discover Earth-Sized Planet Orbiting Long-Living Star

Description

An international team of researchers has made a groundbreaking discovery by finding an Earth-sized planet orbiting an ultra-cool red dwarf star in the Milky Way galaxy. This planet, known as SPECULOOS-3 b, is located just 55 light-years away from Earth and is tidally locked, meaning one side always faces the star while the other remains in darkness. The star it orbits is thousands of degrees cooler than our Sun, yet it bombards the planet with radiation, potentially leaving it without an atmosphere.

The discovery was made through the SPECULOOS project, which aims to explore rocky planets orbiting nearby ultra-cool dwarf stars. The next step for SPECULOOS-3 b is to be studied further by the James Webb Space Telescope for insights into its potential habitability. This incredible finding sheds light on the fascinating world of exoplanets and the mysteries of our universe.

Vocabulary List:

1. **groundbreaking** // (adjective): Making new discoveries innovative.
2. **orbiting** // (verb): Moving in a curved path around a celestial body.
3. **ultra-cool** // (adjective): Describing a star with a lower temperature than typical stars.
4. **tidally locked** // (adjective): When an object's rotation period matches its orbit around another object.
5. **bombards** // (verb): Constantly hits with something usually radiation or particles.
6. **habitability** // (noun): The idea that a planet or celestial body can support life.

Vocabulary quizzes

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

1. What is the term for the act of demonstrating or showing something?

- Option: A. Interaction
- Option: B. Transparency
- Option: C. Manifestation
- Option: D. Equipped

2. Which word refers to stories handed down from earlier times often considered historical but unauthenticated?

- Option: A. Thriving



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- Option: B. Legends
Option: C. Discrepancies
Option: D. Improvements
3. What term is used to describe a standard or point of reference for comparison?
Option: A. Notable
Option: B. Existence
Option: C. Crucial
Option: D. Benchmark
4. Which word indicates the ability to accomplish a job with a minimum expenditure of time and effort?
Option: A. Bombards
Option: B. Efficiency
Option: C. Delves
Option: D. Configuration
5. What does the term "debunked" mean?
Option: A. Clarity
Option: B. Improvements
Option: C. Debunked
Option: D. Orbiting
6. What term is used to describe the quality of being open and honest?
Option: A. Obscurity
Option: B. Transparency
Option: C. Interaction
Option: D. Existence
7. Which word describes something or someone worthy of attention or notice?
Option: A. Equipped
Option: B. Notable
Option: C. Algorithm
Option: D. Orbital
8. What term refers to laws designed to promote fair competition in the marketplace?
Option: A. Antitrust
Option: B. Configuration
Option: C. Showcasing
Option: D. Signals
9. Which word means to present or exhibit something to its best advantage?
Option: A. Thriving
Option: B. Showcasing



Option: C. Manifestation

Option: D. Interaction

10. What term is used to indicate making something better or more satisfactory?

Option: A. Tidally locked

Option: B. Improvements

Option: C. Groundbreaking

Option: D. Orbiting

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

11. _____ between team members is vital for a project's success.

12. The moon is _____ around the Earth.

13. The scientist made a _____ discovery that changed the field of physics.

14. The new gadget has an _____ design that appeals to young consumers.

15. The same side of the moon is always _____ to the Earth.

16. The planet in the solar system _____ by solar radiation.

17. The planet's _____ for life is being investigated by scientists.

18. The team was fully _____ to handle any challenges that arose during the expedition.

19. Efficient network _____ is essential for smooth communication.

20. Could you please _____ your statement for better understanding?

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

21. The small business began after implementing the new marketing strategy.
22. The artist's work was in for years until a retrospective brought it back into the public eye.
23. The research paper into the effects of climate change on marine life.
24. The philosopher pondered the meaning of and its relation to time.



25. The IT specialist was responsible for the network of the entire office building.
26. The actor's most performance was in the critically acclaimed film.
27. The team was fully with all the necessary gear for the dangerous expedition.
28. The new sports car set a(n) for speed and performance in its class.
29. Meaningful between coworkers can improve office morale.
30. The engineer designed a new for faster data processing.

Answer

Multiple Choice: 1. C. Manifestation 2. B. Legends 3. D. Benchmark 4. B. Efficiency 5. C. Debunked

6. B. Transparency 7. B. Notable 8. A. Antitrust 9. B. Showcasing 10. B. Improvements

Gap-Fill: 11. Interaction 12. Orbiting 13. Groundbreaking 14. Ultra-cool 15. Tidally locked 16. Bombards
17. Habitability 18. Equipped 19. Configuration 20. Clarify

Matching sentence: 1. Thriving 2. Obscurity 3. Delves 4. Existence 5. Configuration 6. Notable 7. Equipped
8. Benchmark 9. Interaction 10. Algorithm

CATEGORY

1. Sci/Tech - LEVEL2

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