



Millions-Year-Old Frozen Lake Unveils Ancient Secrets: ScienceAlert

Description

In Lake Enigma, a unique ecosystem has been found under 9 meters of ice in Antarctica. Scientists have discovered microbes that have been isolated for 14 million years.

The research team, led by scientists from Italy, used special tools to drill and collect samples without contaminating the ecosystem.

The microbes in Lake Enigma create a simple food web with different roles. The lake floor is covered in diverse microbial mats, some shaped like thick carpets or large structures.

The water in Lake Enigma is stable and fed by a nearby glacier. Surprisingly, Patescibacteria, a rare type of bacteria, were found thriving in the lake's water column.

These bacteria are very small and unique, playing important roles in the ecosystem. This discovery sheds light on the mysterious world of Antarctic lakes.

The research findings were published in a scientific journal called Communications Earth & Environment.

Vocabulary List:

1. **Ecosystem** /'i:kəʊsɪstəm/ (noun): A community of living organisms and their environment interacting as a system.
2. **Microbes** /'maɪ.kroʊbz/ (noun): Microorganisms especially bacteria that can be found in various environments.
3. **Diverse** /dɪ'vɜːrs/ (adjective): Showing a great deal of variety; very different.
4. **Contaminating** /kən'tæm.ɪ.neɪt/ (verb): Making something impure by exposure to or addition of a poisonous or polluting substance.
5. **Thriving** /θraɪvɪŋ/ (verb): Growing or developing well or prospering.
6. **Discovery** /dɪs'kʌv.ər.i/ (noun): The act of finding or learning something for the first time.

Vocabulary quizzes

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

1. Which term refers to material with particular properties used in research?

Option: Caffeinated

Option: Inflammation



Option: Substances

Option: Apoptosis

2. What term describes a community of living organisms in conjunction with the nonliving components of their environment?

Option: Discovery

Option: Microbes

Option: Ecosystem

Option: Thriving

3. In astronomy what is a term used to describe a celestial body that is smaller than a planet?

Option: Arrhythmia

Option: Pulsar

Option: Orbit

Option: Dwarf

4. What term refers to the identification of the nature of an illness or other problem by examination of symptoms?

Option: Symptoms

Option: Consumption

Option: Dehydration

Option: Diagnosis

5. Which term relates to a belief or behavior passed down within a group or society with symbolic meaning?

Option: Binge

Option: Tradition

Option: Prosperity

Option: Risk

6. What plant is commonly associated with holiday traditions such as kissing under it?

Option: Mistletoe

Option: Prevent

Option: Contaminating

Option: Researchers

7. Which term describes a substance that contains caffeine?

Option: Risk

Option: Research

Option: Caffeinated

Option: Complementary

8. What activity involves systematically investigating into a subject to discover facts interpret information and reach conclusions?



- Option: Discovery
- Option: Telescope
- Option: Signal
- Option: Research

9. What disorder causes an irregular heartbeat rhythm?

- Option: Arrhythmia
- Option: Binge
- Option: Substances
- Option: Prosperity

10. What term refers to microscopic organisms that exist virtually everywhere?

- Option: Diverse
- Option: Microbes
- Option: Apoptosis
- Option: Medicinal

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

11. _____ is the body's response to injury or infection often characterized by redness swelling and pain.

12. Improper waste disposal can lead to soil and water resources being _____ by harmful substances.

13. Excessive alcohol _____ can lead to serious health issues such as liver damage.

14. In a healthy environment diverse species of plants and animals can be seen _____ together.

15. Regular exercise and a balanced diet can help _____ many chronic diseases.

16. Eating a large amount of food in a short period known as a eating _____ can lead to various health issues.

17. Fever cough and fatigue are common _____ associated with the flu.

18. The _____ of antibiotics revolutionized the field of medicine allowing treatment of



bacterial infections.

19. Certain plants have _____ properties and are used in traditional medicine to treat various ailments.

20. Investments in education and infrastructure can lead to economic growth and _____ for a nation.

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

21. is a process of programmed cell death that occurs in multicellular organisms.
22. A flashing light can be used as a to indicate a warning or message.
23. A is an optical instrument used to observe distant objects such as planets and stars.
24. A is a highly magnetized rotating neutron star that emits beams of electromagnetic radiation.
25. The path that a planet takes around a star is called its .
26. Engaging in extreme sports involves a certain level of to one's safety.
27. are individuals who conduct systematic investigations to establish facts and develop new theories.
28. In medicine therapies are used alongside conventional treatments for a holistic approach to healing.
29. The lack of adequate fluid intake can lead to which can be harmful to the body.
30. Economic stability and growth contribute to the overall of a society.

Answer

Multiple Choice: 1. Substances 2. Ecosystem 3. Dwarf 4. Diagnosis 5. Tradition 6. Mistletoe 7. Caffeinated 8. Research 9. Arrhythmia 10. Microbes

Gap-Fill: 11. Inflammation 12. Contaminating 13. Consumption 14. Thriving 15. Prevent 16. Binge 17. Symptoms 18. Discovery 19. Medicinal 20. Prosperity

Matching sentence: 1. Apoptosis 2. Signal 3. Telescope 4. Pulsar 5. Orbit 6. Risk 7. Researchers 8. Complementary 9. Dehydration 10. Prosperity



CATEGORY

1. Health - LEVEL2

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