

New Discoveries Emerge: From Ancient Civilizations to Deep-Sea Life in Latin America

Latin America & Caribbean Science · Answer Key · 16 Questions

1. Which geological event in the Andes Mountains, approximately 6 to 9 million years ago, is believed to have contributed to Earth's global cooling by boosting oceanic carbon dioxide absorption?

A) Intense volcanic activity releasing nutrient-rich ash

- B) Massive glacial meltwater runoff
- C) Subduction of oceanic plates
- D) Formation of new mountain ranges

2. A recent study revealed that nearly half of the endemic tree species in which Mesoamerican region are threatened with extinction, primarily due to agriculture and logging?

- A) The Yucatán Peninsula
- B) The Amazon Basin

C) Mesoamerica (Mexico and Central America)

- D) The Andes foothills

3. Geologists recently discovered one of the world's largest mineral deposits, estimated to contain 13 million tons of copper, located beneath which mountain range?

- A) The Sierra Nevada

B) The Andes Mountains

- C) The Rocky Mountains
- D) The Atlas Mountains

4. In Costa Rica, within the Mesoamerican Biological Corridor, researchers have recently documented new species of mammals, reptiles, amphibians, and plants. Which of these specific examples was highlighted as a newly discovered glass frog species?

A) Hyalinobatrachium sp.

- B) Osteocephalus sp.
- C) Phyllomedusa sp.
- D) Dendropsophus sp.

5. A deep-sea expedition off the coast of Brazil in the South Atlantic Ocean discovered over two dozen new marine species. Which of the following was NOT mentioned as a type of species discovered?

- A) Jellyfish
- B) Siphonophores

C) Anglerfish

- D) Comb jellies

6. For the first time in South America, researchers identified a field of tektites, also known as 'space glass,' formed by meteorite impacts. This discovery was made in which country?

- A) Argentina
- B) Chile
- C) Brazil**
- D) Colombia

7. A new protected area, the Medio Putumayo-Algodón Protected Area, was recently designated in Peru. It safeguards a significant portion of Amazonian rainforest and is home to numerous species, including jaguars, giant river otters, and harpy eagles. What is the approximate size of this newly protected area?

- A) 28,300 hectares
- B) 283,000 hectares**
- C) 2,830,000 hectares
- D) 283 hectares

8. Research supported by a GEO Mountains Small Grant is focusing on monitoring glaciers in Peru's Cordillera Blanca. Which of the following is NOT one of the four glaciers being studied?

- A) Artesonraju
- B) Shallap
- C) Yanamarey
- D) Huascarán**

9. A recent study highlighted that nearly half of the endemic tree species in Mesoamerica are threatened with extinction. Which country in Mesoamerica has the highest percentage of threatened tree species, at 97%?

- A) Nicaragua
- B) El Salvador
- C) Guatemala**
- D) Honduras

10. Archaeologists discovered an ancient city, named Valeriana, hidden beneath the jungle in the Mexican state of Campeche. What technology was crucial in revealing this significant Maya urban center?

- A) Ground-penetrating radar
- B) LiDAR**
- C) Satellite imagery
- D) Magnetometers

11. The Vera C. Rubin Observatory, a new U.S.-government-designed observatory located in Chile, is set to map the universe. What astronomical phenomenon did researchers detect over 2,100 brand new discoveries of in just ten hours of test imaging?

- A) Exoplanets
- B) Black holes
- C) Asteroids**
- D) Supernovas

12. Researchers are experimenting with 'Flonduran' corals in Dry Tortugas National Park, Florida, to enhance reef resilience. What makes these corals unique?

- A) They are genetically modified to resist disease.
- B) They are offspring of Florida elkhorn corals bred with elkhorn corals from Honduras.**
- C) They are cultivated in a laboratory and have never been exposed to natural conditions.
- D) They are a newly discovered species native to Dry Tortugas.

13. A new IAEA-supported project is using nuclear technologies to identify the sources and pathways of microplastics in Antarctic ecosystems. Which region's researchers are collaborating with IAEA scientists on this study?

- A) The Patagonian region
- B) The Chilean Antarctic Institute**
- C) The Brazilian Antarctic Program
- D) The Argentinian National Scientific and Technical Research Council

14. A recent study on Caribbean reef sharks in the Bahamas found that they prefer to live where prey is most abundant. What specific type of reef areas do they seem to favor for easier hunting?

- A) Large, open reef areas
- B) Deep-sea trenches
- C) Small reef areas with densely populated prey**
- D) Coral nurseries

15. A new species of sandfly, *Trichophoromyia macrisae*, was discovered at the Manu Biological Station in the Amazon. What is the public health significance of this discovery?

- A) It is a new vector for malaria transmission.
- B) It carries the parasite *Leishmania*, which causes leishmaniasis.**
- C) It is a significant food source for local wildlife.
- D) It indicates a decline in insect biodiversity.

16. In Argentina, paleontologists have identified a new species of raptor-like dinosaur named Kank australis, which lived about 70 million years ago. What is unique about its presumed feeding habits?

- A) It hunted large mammals.
- B) It was an omnivore that also consumed plants.
- C) It appears to have been a fish hunter, possibly resembling modern herons.**
- D) It scavenged on carcasses of larger dinosaurs.