

Ancient Civilizations Unearthed & Genetic Mysteries Solved: Latest South Am

South American Science · Answer Key · 14 Questions

1. A recent genetic study revealed that the Indigenous peoples of South America were shaped by at least three major migratory dispersals. Which of the following is the most recently identified migratory wave?

- A) A wave originating from Mesoamerica approximately 1,300 years ago.**
- B) The initial peopling of the Americas from Beringia around 15,000 years ago.
- C) A wave that partially replaced earlier groups approximately 9,000 years ago.
- D) A dispersal event from Southeast Asia around 8,000 years ago.

2. Archaeologists in Peru recently uncovered over 100 new structures at Gran Pajatén, a pre-Columbian settlement. This site is primarily associated with which ancient civilization known for its resistance to the Inca Empire?

- A) The Nazca Civilization
- B) The Moche Civilization
- C) The Chachapoya Civilization**
- D) The Inca Civilization

3. A new species of termite, *Cryptotermes mobydicki*, discovered in South American rainforests, has gained attention for a unique physical characteristic. What is this characteristic?

- A) An unusually large colony size exceeding one million individuals.
- B) A head that strongly resembles that of a sperm whale.**
- C) The ability to survive in extreme desert environments.
- D) A symbiotic relationship with a newly discovered species of orchid.

4. Recent paleontological discoveries in Argentina have shed light on megaraptorans, a group of theropod dinosaurs. What significant find was made regarding a new megaraptoran species, *Joaquinraptor casali*?

- A) It was discovered to be the largest megaraptoran ever found, measuring over 30 feet long.
- B) Its fossilized remains included a crocodile relative's leg bone in its jaws, suggesting its diet.**
- C) It possessed feathers similar to those of modern birds, providing direct evidence of avian ancestry.
- D) It was found with intricate tools, indicating advanced cognitive abilities.

5. A groundbreaking study of Indigenous American genomes revealed a previously unknown third wave of migration into South America. This wave is believed to have originated from which region?

- A) The Arctic region of North America
- B) Mesoamerica**
- C) East Asia
- D) Sub-Saharan Africa

6. In Peru's Andes, a new species of mouse opossum was discovered and named *Marmosa chachapoya*. This discovery is notable because the species was found at an unusually high altitude for its genus, near which type of site?

- A) A major volcanic caldera
- B) A recently active geothermal field
- C) An archaeological site**
- D) A large glacial lake

7. Scientists have identified a new beetle species, *Aequatobolbus otongachi*, in Ecuador's Chocó region. This discovery highlights the critical need for conservation in this area, which is known for its:

- A) Extensive desert landscapes and rare cacti.
- B) Rich biodiversity and threatened ecosystems.**
- C) Subterranean cave systems with unique mineral formations.
- D) High-altitude grasslands with migratory bird populations.

8. A recent paleontological discovery in Patagonia, Argentina, identified a new sauropod species, *Bicharracosaurus dionidei*, dating back approximately 155 million years. What makes this find particularly significant in terms of dinosaur evolution?

- A) It is the first sauropod fossil found in South America from the Jurassic period.
- B) It exhibited unique adaptations for swimming, suggesting an aquatic lifestyle.
- C) It combined features of both brachiosaurids and diplodocids, two usually distinct sauropod groups.**
- D) It was found to be a feathered dinosaur, challenging previous classifications.

9. Research on South American Indigenous genetic diversity has confirmed the presence of 'Ypykuéra' ancestry. This ancestry shows a genetic link between some Indigenous Americans and populations from which other distant geographical region?

- A) Scandinavia
- B) Australasia**
- C) North Africa
- D) Eastern Europe

10. A lost ceremonial temple, dating back 4,000 to 5,000 years, was discovered in northwestern Peru. What notable artifacts were found alongside skeletal remains within the temple walls?

- A) Advanced astronomical tools and calendars.
- B) Intricately carved jade figurines and ceremonial masks.
- C) A possible offering wrapped in linen.**
- D) Remnants of advanced metalworking, including gold alloys.

11. A new study published in Nature on April 22, 2026, analyzed the largest genomic dataset of Indigenous Americans to date. What previously undocumented migratory wave into South America did this study identify?

- A) A wave originating from Oceania approximately 5,000 years ago.
- B) A wave from Northern Europe around 2,000 years ago.
- C) A wave from Mesoamerica approximately 1,300 years ago.**
- D) A wave from East Africa around 10,000 years ago.

12. In Peru's Casma River valley, archaeologists discovered an ancient structure that predates the Chankillo Solar Observatory. What is the significance of this finding regarding early astronomical practices in the Americas?

- A) It suggests that complex astronomical planning emerged much later than previously thought.
- B) It indicates that early astronomical observations were solely focused on the moon.
- C) It points to the possibility of organized astronomical planning emerging far earlier than previously documented.**
- D) It reveals that early observatories were exclusively built underground.

13. A recent discovery in the Amazon rainforest of Peru has identified an unknown family of microbes uniquely adapted to specific environmental conditions. What is the significant dual role of these microbes in relation to climate change?

- A) They exclusively absorb greenhouse gases, thus mitigating climate change.
- B) They have the potential to either moderate or intensify climate change through their role in the carbon cycle.**
- C) They are responsible for generating methane, a potent greenhouse gas.
- D) They only thrive in areas with high oxygen levels, indicating a lack of climate impact.

14. The discovery of a 3D mural at the Huaca Yolanda excavation site in Peru, potentially dating back 4,000 years, has shifted archaeological understanding. What does this mural's imagery, including a bird of prey with diamond motifs, offer insights into?

A) The development of early musical instruments.

B) The emergence of social hierarchy and the cosmovision of formative coastal civilizations.

C) Evidence of widespread warfare and territorial expansion.

D) The early domestication of marine animals for food.