NO PREP

The Sacred Cenote

Sacrifices, Offerings, and Underwater Archaeology

Includes: Student reading, case study, differentiated questions, teacher key

Name: Period: Date:

The Sacred Cenote: Sacrifices, Offerings, and Underwater Archaeology

A Hole in the Earth That Held History

In the limestone bedrock of the Yucatan Peninsula, where rivers are almost entirely absent, the earth periodically opens to reveal natural pools of fresh water. These sinkholes — cenotes — formed where the roof of an underground water chamber collapsed, creating vertical-walled pools that plunge tens of meters to the water surface below. To the Maya, cenotes were sacred openings to Xibalba, the underworld, the realm of the rain god Chaac, and the dead. They were places of prayer, places of offering, and sometimes, places of sacrifice. The Sacred Cenote at Chichen Itza — also called the Well of Sacrifice — is roughly 60 meters in diameter and its water surface lies about 27 meters below the rim. For centuries after the

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Edward Thompson and the Dredge

Edward Thompson arrived in the Yucatan in 1885 as the United States consul in Merida and became obsessed with Chichen Itza. He purchased the hacienda that included the ruins and spent decades exploring the site. In 1904, having read the account of Diego de Landa's description of offerings thrown into the cenote, Thompson imported a dredge and began mechanically scooping the bottom of the Sacred Cenote. What the dredge brought up was extraordinary: gold discs and figurines, jade ornaments, bells of copper, rubber balls, copal incense, carved bone

objects, and pottery. Among the material were human skeletal remains: skulls, limb bones, and other fragments representing dozens of individuals. Thompson shipped the most valuable objects to the Peabody Museum at Harvard University without permission from Mexican authorities. This act of unilateral removal would later generate a major diplomatic controversy between the United States and Mexico, with Mexico eventually recovering some (but not all) of the objects. The dredging method was also archaeologically destructive. The mechanical dredge mixed objects from different time periods, destroyed contextual associations, and damaged fragile artifacts. Thompson retrieved objects, but he lost the information that careful excavation would have preserved: which objects were found together, at what depths, in what configurations. By modern standards, the Sacred Cenote operation was a salvage disaster masquerading as archaeology.

Underwater Archaeology Takes Over

Scientific diving became possible in the mid-20th century, and archaeologists began to see cenotes differently, as sites that could be excavated carefully underwater, with the same attention to context and stratigraphy that fieldwork on land required. CEDAM, a Mexican underwater exploration group, conducted diving operations at the Sacred Cenote in the 1960s and recovered additional objects that Thompson's dredge had missed or damaged. More rigorous underwater archaeology followed. Archaeologists trained in both excavation and diving developed methods for working on the cenote floor: mapping grid systems underwater, photographing finds in situ before removal, logging depths and positions carefully. The challenges are enormous. Visibility in cenotes can be poor, silt is easily disturbed by movement, and delicate organic materials can be destroyed if mishandled. But the rewards are also extraordinary: cenotes preserve organic materials that would never survive in open air.

What Was Actually Found — And What It Means

Analysis of objects recovered from the Sacred Cenote reveals a complex picture of offering behavior over many centuries. The gold and copper objects came largely from outside the Maya world — from Colombia, Panama, and other regions — indicating the cenote drew offerings from an enormous trade network. Jade objects were local prestige goods. The human remains show a mix of ages and both sexes, contradicting the simplistic narrative of virgin sacrifice that early researchers

promoted. The cenote appears to have served as a place of ritual offering during droughts and other crises — throwing precious objects and, sometimes, people into the underworld as petitions to the rain god Chaac. Isotope analysis of human bones from the cenote suggests some individuals came from distant regions, possibly sacrificed prisoners of war or specially selected individuals brought from afar for ritual purposes. The cenote was not primarily a site of mass murder — it was a complex sacred space used over many centuries for a variety of ritual purposes.

Cenotes Beyond Chichen Itza

Cenote archaeology has expanded dramatically across the Yucatan in recent decades. Underwater survey teams have mapped extensive cave and cenote systems that connect beneath the jungle floor, creating a vast underwater world. Inside these submerged cave systems, archaeologists have found human remains dating to the Pleistocene era — people who entered the caves when water levels were lower, over 10,000 years ago. Maya ceremonial objects left in deep underwater chambers speak to a cosmology in which the water world beneath the earth was as real and significant as the world above.

Key Information: The Sacred Cenote at Chichen Itza

Detail	Information
Location	Chichen Itza, Yucatan, Mexico
Dimensions	~60 meters diameter; water surface 27 meters below rim
Maya Significance	Sacred entrance to Xibalba (underworld); associated with rain god Chaac
Thompson Dredging	1904–1910; recovered gold, jade, copper, human remains; destroyed context
Controversy	Thompson shipped objects to Harvard without Mexican authorization
CEDAM Dives	1960s; first scientific diving operations; additional objects recovered

Detail	Information
Human Remains	Multiple ages and sexes; some from distant regions (isotope analysis)
Oldest Cenote Finds	Human remains 10,000+ years old in connected cave systems

Case Study: Dr. Natalia Finds the Mask

Dr. Natalia Sousa was fifteen meters below the surface of a cenote near Tulum, hovering over the silt floor and trying not to breathe too hard through her regulator. She was a Mexican underwater archaeologist, and she had been working this cenote system for three field seasons. Her dive lamp picked up something pale in the silt. Carefully — very carefully — she used her hand to fan the water above it, letting the gentle current reveal the object without disturbing it. It was jade. Deep green, finely carved, a face she couldn't fully see yet. She did not pick it up. She took photographs from every angle, logged the depth and GPS coordinates through her underwater tablet, and marked the site with a buoy line. Then she swam back to the surface. Her dive partner called from the boat: 'Find anything?' 'A jade mask,' she said, pulling off her mask. 'Probably Classic period. Maybe fifth or sixth century.' 'Why did you leave it?' 'Because I want to know exactly what's around it before I move it.' She thought of Thompson's dredge, which had mixed centuries of history into one muddy pile. 'You can always pick something up. You can never put the information back.'

1. Dr. Sousa's decision to leave the jade mask in place rather than immediately retrieving it reflects a core principle of modern archaeology. What is that principle, and why is context so important when studying objects found in a ritual space like a cenote?

2. Compare Dr. Sousa's method to Edward Thompson's dredging operation. What specific information does her approach preserve that Thompson's approach destroyed?

Multiple Choice

1. Why was Edward Thompson's dredging of the Sacred Cenote considered archaeologically destructive?

a) The mechanical dredge mixed objects from different time periods and destroyed contextual information

b) He used chemicals that dissolved the objects he was trying to recover

c) He only recovered gold objects and threw everything else back in the cenote without any documentation

d) He worked without any documentation system and kept no records of finds

2. What did isotope analysis of human bones from the Sacred Cenote reveal?

a) No human sacrifice occurred at the cenote; bones were from accidental drowning and other accidents

b) Some individuals came from distant regions, possibly prisoners or specially selected individuals

c) All individuals were young women from Chichen Itza itself

d) The bones dated to after the Spanish conquest rather than the Maya period

3. What is significant about human remains found in underwater cave systems connected to Yucatan cenotes?

a) They all show evidence of ritual sacrifice by decapitation

b) They date to after the Spanish conquest and represent colonial-era burials in the Yucatan

c) Some are over 10,000 years old, from when water levels were lower during the Pleistocene

d) They are the remains of Maya priests who performed underwater ceremonies

Matching

Write the letter of the correct definition on the line next to each term.

Term	Definition
1. ___ Cenote	A) A Latin term meaning 'in place'; refers to documenting an artifact before removing it from its location
2. ___ Xibalba	B) The Maya rain god associated with cenotes, water, and agricultural fertility
3. ___ Chaac	C) The Maya underworld, believed to be accessible through cenotes and cave entrances
4. ___ In situ	D) A scientific method of examining bone chemistry to determine diet and geographic origin
5. ___ Isotope analysis	E) A natural limestone sinkhole exposing underground water, considered sacred by the Maya

Fill-in-the-Blank

1. Edward Thompson shipped objects from the Sacred Cenote to the _____ Museum at Harvard University without Mexican authorization.

2. Gold and copper objects found in the Sacred Cenote came largely from outside the Maya world, including _____ and Panama, indicating a vast trade network.

3. The Sacred Cenote at Chichen Itza is approximately 60 meters in diameter, with the water surface _____ meters below the rim.

Short Answer

Answer each question in 2-4 complete sentences.

1. Explain why the Sacred Cenote was significant to the Maya in both a religious and practical sense. How did these two dimensions of its importance connect?

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2. What ethical problems did Edward Thompson's removal of objects from the Sacred Cenote create? How do his actions reflect broader issues in the history of archaeology?

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3. How has scientific underwater archaeology changed our understanding of the Sacred Cenote compared to what Thompson's dredging suggested? What specific findings have complicated earlier interpretations?

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