Teacher Answer Key

Case Study

1. Skeletal remains can reveal age, biological sex, height, ancestry, and signs of disease or injury. However, they cannot tell us a person's name, social identity, or cultural background without additional evidence. The limits of skeletal analysis mean that some questions — like whether someone was Indigenous — may require DNA testing or historical records.

2. NAGPRA is the Native American Graves Protection and Repatriation Act, a 1990 U.S. law requiring federally funded institutions to return Native American remains and sacred objects to affiliated tribes. If the remains are determined to be Indigenous, a tribal affiliation would need to be identified, and the relevant tribe would have legal standing to request repatriation — meaning Maya's family would likely have limited say in the outcome.

Multiple Choice

1. C
2. D
3. A

Matching

1-E, 2-C, 3-B, 4-A, 5-D

Fill-in-the-Blank

1) bioarchaeology, 2) ancient DNA (aDNA), 3) NAGPRA

Short Answer (Sample Responses)

Q1: Forensic anthropology applies bone analysis in legal contexts — identifying crime victims or disaster casualties — while bioarchaeology focuses on understanding past populations through archaeological remains. The distinction matters because forensic work must meet legal evidentiary standards, while bioarchaeological findings are interpreted in a historical and cultural framework.

Q2: For many Indigenous communities, the dead are not simply scientific specimens — they are ancestors with cultural and spiritual significance. Disturbing remains without community consent is seen as a violation of religious beliefs and cultural sovereignty, regardless of the scientific benefits researchers might claim.

Q3: Ancient DNA revealed the existence of Denisovans — an entirely unknown human relative — from a single finger bone, something no fossil analysis alone could

have established. Interpreting aDNA is complicated by degradation, contamination risk, and the statistical complexity of genetic analysis, meaning results must be treated cautiously.