Teacher Answer Key

Case Study

1. The presence of goods from at least seven different civilizations on a single ship demonstrates that Bronze Age trade was far more interconnected and international than previously believed. Copper from Cyprus, tin from central Asia, glass from Egypt, ebony from Africa, and amber from the Baltic were all brought together through a vast network of exchange that spanned thousands of miles. This level of integration required established trade routes, diplomatic relationships, and shared commercial practices across multiple cultures.

2. Shipwrecks preserve a complete snapshot of a single moment in time, including the entire cargo, the ship's construction, and personal items belonging to the crew. Land-based sites are typically disturbed by centuries of rebuilding, looting, and natural processes that scatter and mix artifacts from different time periods. The cold, low-oxygen conditions of the deep sea floor also preserve organic materials like wood, rope, and food that would normally decay on land, giving archaeologists a far more complete picture of ancient life and trade.

Multiple Choice

1. C

2. D

3. B

Matching

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

Fill-in-the-Blank

1) tin, 2) amphorae, 3) bronze gears

Short Answer (Sample Responses)

Q1: Archaeologists can identify where amphorae were manufactured by analyzing their distinctive shapes and the chemical composition of their clay. By mapping where specific types of amphorae are found in shipwrecks and at port sites across the Mediterranean, researchers can trace the routes along which specific goods like wine, olive oil, and fish sauce were transported throughout the Roman Empire.

Q2: The Antikythera mechanism revealed that ancient Greek engineers were capable of building complex mechanical computers with intricate gear systems over two thousand years ago. Its sophistication, with at least 30 interlocking bronze gears

designed to predict astronomical positions and eclipses, was not matched again in Europe for more than a thousand years. This discovery proved that ancient technological capabilities were far more advanced than scholars had previously assumed.

Q3: Modern marine archaeologists use sonar mapping to scan the sea floor and identify potential wreck sites, remotely operated vehicles (ROVs) to explore wrecks at depths too dangerous for human divers, and saturation diving techniques that allow divers to work at significant depths for extended periods. These technologies have opened up previously unreachable areas of the sea floor and allow for careful, systematic excavation of underwater sites.