Teacher Answer Key

Case Study

1. The statue was well preserved because it was buried under a thick layer of silt and sediment on the seafloor. This sediment created an oxygen-poor environment that slowed erosion and chemical degradation, effectively sealing the granite carving away from the destructive forces of waves, marine organisms, and exposure to open water.

2. After the initial discovery, the team should thoroughly document the statue in its original position using underwater photography and video, record its precise GPS coordinates and depth, map its relationship to surrounding artifacts and structures, and assess the statue's structural condition before developing a careful extraction plan that minimizes risk of damage to both the artifact and the surrounding site.

Multiple Choice

1. A

2. B

3. D

Matching

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

Fill-in-the-Blank

1) magnetometer, 2) Nile, 3) shipwrecks

Short Answer (Sample Responses)

Q1: Scholars doubted the existence of Thonis-Heracleion because the city was known only from brief mentions in ancient Greek and Egyptian texts. Without physical evidence or a confirmed location, many historians assumed the accounts were exaggerated or legendary rather than descriptions of a real place.

Q2: The city's massive stone temples and statues placed enormous weight on the soft clay and sand sediments of the Nile Delta. Over time, this weight compressed the unstable ground beneath the structures, and when earthquakes struck, the waterlogged clay liquefied, causing the heavy buildings to sink rapidly into the ground.

Q3: An underwater museum would allow visitors to experience the ruins in their original context on the seafloor, preserving the spatial relationships between artifacts and structures. Removing large stone statues and temple remains risks

damaging them during extraction and eliminates the archaeological context that makes the site scientifically valuable.