Teacher Answer Key

Case Study

1. A successful experiment proves that something could have happened (feasibility), not that it actually did. Kenji proved that a Bronze Age vessel could cross open water, but this alone does not prove that Bronze Age people actually made such crossings — additional evidence like trade goods found at both ends would be needed to confirm that.

2. Kenji formed a hypothesis that Bronze Age boats could sustain open-water voyages, built a replica using only ancient materials, and tested it by sailing across the Mediterranean. The results showed the boat was seaworthy despite constant leaking, which supported his hypothesis while also revealing the difficulty and skill that such voyages would have required.

Multiple Choice

1. A

2. C

3. D

Matching

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

Fill-in-the-Blank

1) experimental archaeology, 2) replication, 3) flintknapping

Short Answer (Sample Responses)

Q1: Experimental archaeology starts with a hypothesis, then tests it by recreating ancient objects or processes. For example, a researcher might hypothesize that a stone tool was used for cutting hide, make a replica using the same techniques, use it to cut hide, and compare the wear patterns to marks found on ancient tools.

Q2: The Kon-Tiki expedition proved that crossing the Pacific on a balsa raft was physically possible, but genetic and linguistic evidence later showed that Polynesia was settled from Southeast Asia, not South America. This demonstrates that feasibility is not the same as historical proof, and responsible experimental archaeologists acknowledge this distinction.

Q3: Experimental archaeology reveals that ancient techniques required far more skill and knowledge than modern people typically assume. For example, building a Bronze Age boat or mastering flintknapping takes years of practice, and ancient

beer brewing required sophisticated understanding of fermentation — all evidence that ancient people were intelligent and capable, not primitive.