## Teacher Answer Key

### Case Study

1. The charcoal layer was a stratigraphic feature — a hearth or cooking fire dating to approximately 800 years ago. It could have provided information about what was burned, what food was cooked, the time period of occupation through radiocarbon dating, and its relationship to other layers above and below it.

2. Elena's mistake shows that every layer removed during excavation is permanently destroyed. By pressing too hard and cutting through the hearth layer without recognizing it, she lost information that can never be recovered. This illustrates why patience and proper technique are essential — excavation cannot be undone.

### Multiple Choice

1. B

2. C

3. B

### Matching

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

### Fill-in-the-Blank

1) stratigraphy, 2) test pits, 3) datum point

### Short Answer (Sample Responses)

Q1: Permits ensure that excavations are legally authorized and follow professional standards. A research question gives the dig a clear purpose and guides decisions about where and how to excavate. Without these steps, an excavation could be illegal, unfocused, and could destroy irreplaceable archaeological information.

Q2: Both a looted site and an unpublished excavation result in knowledge that is inaccessible to the broader scientific community. Even though the data exists in an unpublished excavation, no other researcher can use, verify, or build upon it, making the destructive act of excavation essentially wasted.

Q3: Archaeologists use troweling to carefully scrape soil one thin layer at a time, and they screen all removed soil through wire mesh to catch tiny artifacts like beads and bone fragments. These small finds are important because they can reveal information about diet, trade, technology, and daily life that larger objects alone cannot provide.