Teacher Answer Key

Case Study

1. The findings are compelling because the anomalies match the expected size, depth, and spacing of graves, and they were found at a site with documented historical evidence of children dying at the school. The combination of GPR data and historical records makes the interpretation strong.

2. The community used GPR technology to get the information they needed about what happened to their relatives, but chose to honor the dead by leaving them undisturbed. This shows how archaeological technology can serve community needs for truth and healing rather than being used only for academic excavation.

Multiple Choice

1. D

2. A

3. C

Matching

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

Fill-in-the-Blank

1) ultrasound, 2) Kamloops, 3) radargram

Short Answer (Sample Responses)

Q1: Dry sandy soil allows radar signals to penetrate deeply and produce clear reflections from buried features. Wet clay absorbs radar energy rapidly, reducing penetration depth and creating noisy data that is hard to interpret, which may cause archaeologists to miss important features.

Q2: Non-invasive technology is important at residential school sites because communities may prefer not to disturb the dead through excavation. GPR allows them to locate potential graves and document what happened while respecting the wishes of survivors and descendants.

Q3: Raw GPR data is not intuitive and different features like walls, pipes, roots, and graves can look similar. Without expert knowledge of how different materials produce different reflection patterns, an untrained person could easily misidentify features or miss them entirely.