Teacher Answer Key

Case Study

1. Possible challenges include triggering small quakes, the potential overuse of geothermal reservoirs, and managing environmental impacts.

2. They developed regulations for drilling, monitored geothermal wells carefully, and used the resource sustainably to support both economic development and environmental goals.

Multiple Choice

1. A

2. C

3. D

Matching

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

Fill-in-the-Blank

1) inner core, 2) Oceanic crust, 3) Geothermal

Short Answer (Sample Responses)

Q1: By mapping fault zones and volcanic regions, experts can design building codes and evacuation plans, minimizing damage and loss of life.

Q2: The mantle's semi-solid state and convection currents allow tectonic plates to move, shaping continents and oceans over time.

Q3: The Earth's magnetic field, generated in the core, is essential for compass navigation and helps protect satellites and communication systems from solar radiation.