

Name \_\_\_\_\_

## Shaking Ground and Uncertain Predictions: Can Earthquakes Be Forecasted?

### Open-Ended Response Answer Key

1. Answers will vary based on the historical earthquake event discussed. Include details about the event's impact and the level of predictability based on historical records and geological evidence.
2. Diverse geological conditions worldwide result from unique tectonic settings, making it challenging to apply a one-size-fits-all approach to earthquake prediction. Provide examples of regions with distinct geological characteristics.
3. Ethical considerations in earthquake prediction and early warning systems involve balancing the need for accurate information with the potential for false alarms. Discuss the consequences of false alarms and the importance of transparent communication.
4. Community preparedness is crucial in earthquake-prone regions to reduce the impact of earthquakes. Individuals and communities can take steps such as creating emergency plans, securing structures, and educating the public about earthquake safety.

