

Name \_\_\_\_\_

## Epicenter Exploration: How Earthquake Epicenters Are Determined

### Short Answer

1. What are P-waves and S-waves, and why are they essential in earthquake detection?
2. Describe the three-circle method used by scientists to determine earthquake epicenters.
3. Why is the "Ring of Fire" a hotspot for earthquakes, and what role does the Pacific Tsunami Warning Center play in this region?
4. How does the number of seismometers used affect the precision of determining earthquake epicenters?
5. Imagine you are a scientist monitoring seismometers during an earthquake. Explain the process you would follow to determine the epicenter's location.

