

Name \_\_\_\_\_

## Taming the Tsunamis: Understanding Their Origins and Measures for Detection and Mitigation

### Short Answer Key

1. Tsunamis are primarily generated by underwater earthquakes, volcanic eruptions, and submarine landslides. These events displace a significant amount of water, creating large waves that propagate across the ocean.
2. Tsunami waves are different from regular ocean waves because they have extremely long wavelengths and high energy. Regular ocean waves are typically generated by wind and have much shorter wavelengths.
3. Tsunami warning centers are responsible for monitoring seismic data and issuing tsunami alerts to potentially affected areas. They use advanced models to predict the tsunami's arrival time and height, providing early warnings to coastal communities.
4. Deep-ocean tsunami sensors are equipped with pressure sensors that detect the passage of tsunami waves in the open ocean. They are crucial for providing real-time data to enhance tsunami detection and warning systems.
5. Community education programs and evacuation plans are essential in tsunami-prone areas to inform residents about the risks and necessary actions during a tsunami warning. These plans help residents find safe areas and ensure their safety.

