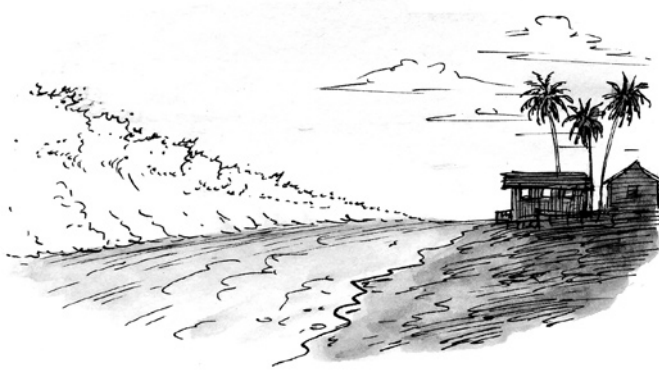
Tsunami Scenarios



Scenario A

Seismologists have just registered an earthquake in Seward, Alaska, that is big enough to produce a tsunami. The ocean depth is 4,000 meters. Use the wave speed formula to approximate the tsunami's speed. After calculating the speed, use your atlas to estimate distances from the tsunami's epicenter to each location. Calculate the travel time to each location and write it on your map.

- Kodiak, Alaska
- Kauai Island, Hawaii
- Kwajalein, Marshall Islands

Scenario B

A tsunami has just been detected off of Ka Lae, Hawaii. The ocean depth is 4,500 meters. Use the wave speed formula to approximate the tsunami's speed. After calculating the speed, use your atlas to estimate distances from the tsunami's epicenter to each location. Calculate the travel time to each location and write it on your map.

- Dutch Harbor, Alaska
- Kwajalein, Marshall Islands
- Samoa

Scenario C

A large part of a volcano in the Gran Canaria, Canary Islands, has just fallen into the ocean that is 3,500 meters deep. Use the wave speed formula to approximate the tsunami's speed. After calculating the speed, use your atlas to estimate distances from the tsunami's epicenter to each location. Calculate the travel time to each location and write it on your map.

- Terceira, Azores
- Safi, Morocco
- St. Johns, Newfoundland