

Passage 1

Earthquakes produce seismic waves that can travel long distances through Earth. Two types of seismic waves are p-waves and s-waves. P-waves typically travel 6-13 km/sec and s-waves typically travel 3.5-7.5 km/sec. Figure 1 shows how p-waves and s-waves move and are refracted (bent) as they travel through different layers of the Earth's interior. A seismograph is an instrument that detects seismic waves and records their intensity. Figure 2 shows, in general, how long it takes p-waves and s-waves to travel given distances along the surface from an earthquake focus (point of origin of seismic waves).

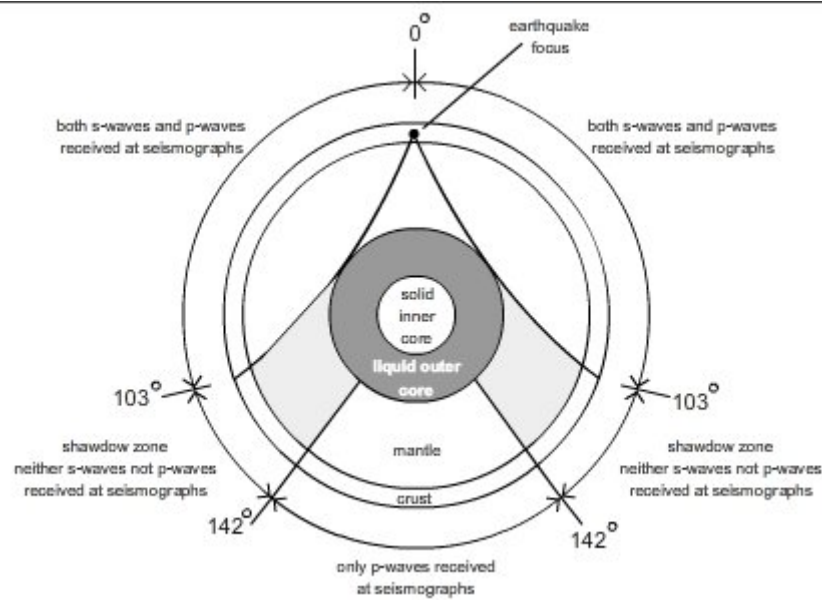


Figure 1

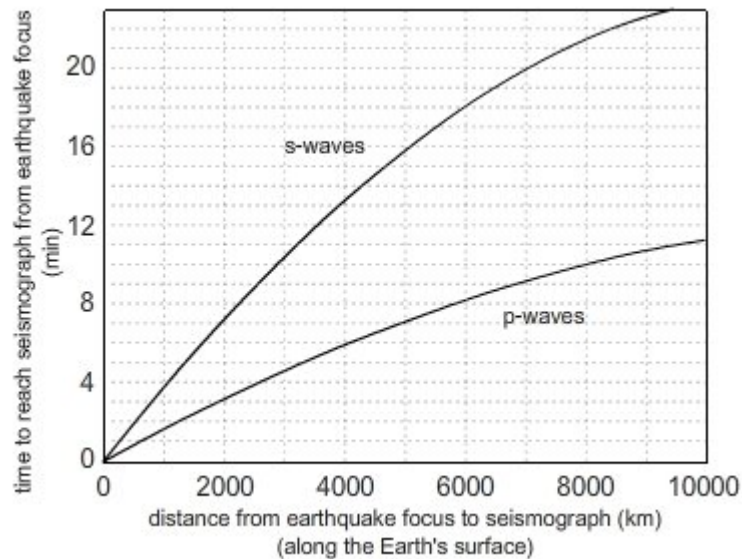


Figure 2