

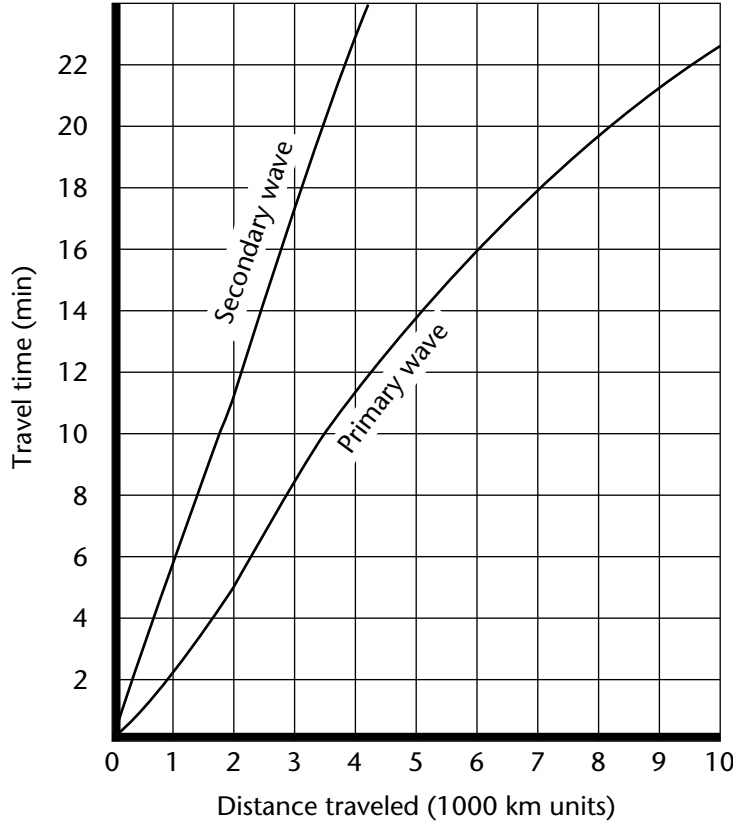
Chapter 9

Use with Section 2

REINFORCEMENT

● Earthquake Information

The graph below shows travel time in minutes and distance traveled for primary and secondary waves. Primary and secondary waves start at the same time but do not travel at the same speed. Study the graph. Use the graph to help answer the questions that follow.



- How long does it take for a primary wave to travel 2000 kilometers? _____
- How long does it take for a secondary wave to travel 2000 kilometers? _____
- How far does a secondary wave travel in 10 minutes? _____
- How far does a primary wave travel in 10 minutes? _____
- What happens to the time difference between primary and secondary waves as the distance traveled gets longer? _____

- Suppose a primary and secondary wave both travel a distance of 4000 kilometers before they are picked up by a seismograph. Which wave will arrive first? _____
- How much time lag at 4000 km will there be between these two waves? _____
- Suppose both a primary and secondary wave start together and travel for 5 minutes. Which wave will travel farther? _____