Name _____ Class _____ Date _____

SECTION
2-1 Earthquakes

(pages 32–40)

KEY CONCEPTS

▲ An earthquake is the shaking and trembling that results from the sudden movement of part of the Earth's crust.

Building Vocabulary Skills: Relating Terms

Explain how the terms in each pair or group are related.

1. Earthquake: tsunami

2. Focus: epicenter

3. Seismic wave: earthquake

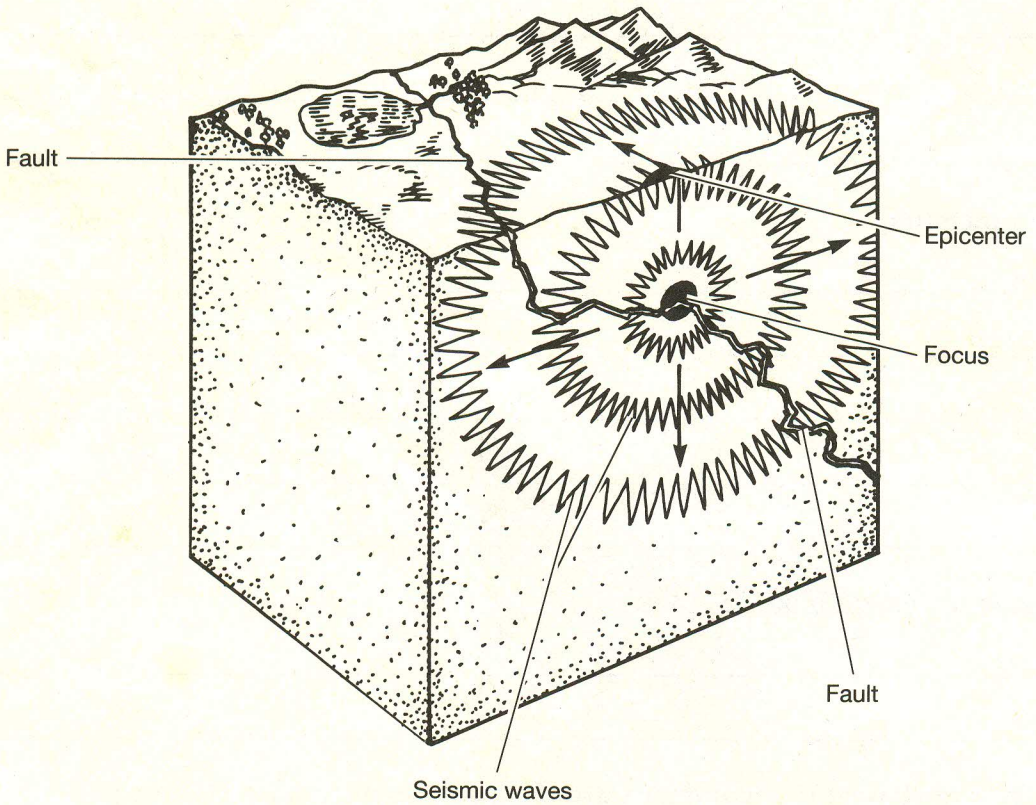
4. Primary wave (P wave): secondary wave (S wave): surface wave (L wave)

5. Seismograph: seismogram: seismologist: Richter scale

Characteristics of Earthquakes: Illustrating the Main Ideas

Part 1

The following diagram shows the relationships that exist between a fault in the Earth's crust and the epicenter and focus of an earthquake. Study the diagram, then answer the questions.



1. What relationship exists between the focus of an earthquake and a fault in the Earth's crust?

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2. What relationship exists between the focus of an earthquake and the epicenter?

_____

_____

3. What relationship exists between the epicenter of an earthquake and a fault?

_____

_____

4. Where does the energy created by an earthquake originate? In what direction does it travel? _____

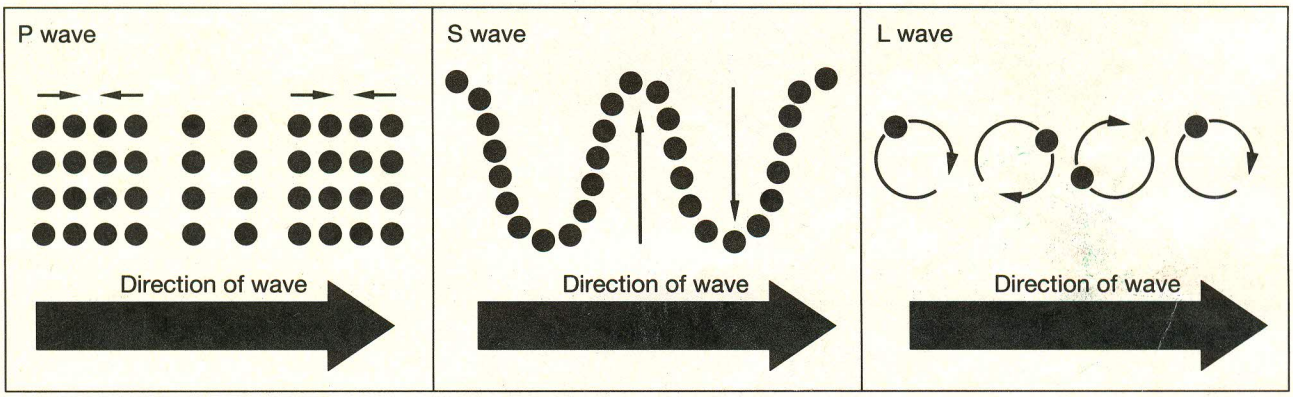
_____

_____

_____

Part 2

Each of the following drawings shows a different type of seismic wave. Study the drawings, then answer the questions.



1. Describe the movement of particles caused by a P wave.

_____

_____

_____

2. Describe the movement of particles caused by an S wave.

_____

_____

_____

3. Describe the movement of particles caused by an L wave.

4. P waves travel the fastest and L waves travel the slowest of all earthquake waves. From what you see in the drawings, can you think of a reason for this?