

**M O D E R N E A R T H S C I E N C E**

## Chapter 6

**Earthquakes****Review**

Choose the best response. Write the letter of that choice in the space provided.

- \_\_\_\_\_ 1. Vibrations in the earth caused by the sudden movement of rock are called  
a. epicenters.      b. earthquakes.      c. faults.      d. tsunamis.
- \_\_\_\_\_ 2. The elastic rebound theory states that as a rock becomes stressed, it first  
a. deforms.      b. melts.      c. breaks.      d. shifts position.
- \_\_\_\_\_ 3. The point along a fault where an earthquake begins is called the  
a. fracture.      b. epicenter.      c. gap.      d. focus.
- \_\_\_\_\_ 4. The point on the earth's surface directly above the point where an earthquake occurs is called the  
a. focus.      b. epicenter.      c. fracture.      d. fault.
- \_\_\_\_\_ 5. A characteristic of earthquakes that causes the most severe damage is  
a. a deep focus.      b. an intermediate focus.  
c. a shallow focus.      d. a deep epicenter.
- \_\_\_\_\_ 6. Most severe earthquakes occur  
a. in mountains.      b. along major rivers.  
c. at plate boundaries.      d. in the middle of plates.
- \_\_\_\_\_ 7. The boundary of the Pacific plate scrapes against that of the North American plate and forms  
a. a single fault.      b. a subduction zone.  
c. a volcano.      d. a fault zone.
- \_\_\_\_\_ 8. P waves travel through  
a. solids only.      b. liquids and gases only.  
c. both solids and liquids.      d. liquids only.
- \_\_\_\_\_ 9. S waves cannot pass through  
a. solids.      b. the mantle.  
c. the earth's outer core.      d. the asthenosphere.



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**Chapter 6**

**Read each question or statement and answer it in the space provided.**

- 2. If a seismograph station measures P waves but no S waves from an earthquake, what can you conclude about the earthquake's location?

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- 3. Two cities are struck by the same earthquake. The cities are the same size, are built on the same type of ground, and have the same types of buildings. The city in which the quake measured IV on the Mercalli scale suffered \$1 million in damage. The city in which the quake measured VI on the Mercalli scale suffered \$50 million in damage. What might account for this great difference in damage costs?

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- 4. Would an earthquake in the Colorado Rockies be likely to form a tsunami? Explain why.

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**Chapter 6**

**Application**

**Read each question or statement and answer it in the space provided.**

- 1. You are going to choose a building site for a home. You would like a high place with a view, but you are concerned about earthquakes. What information do you need to make an informed decision about the site?

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- 2. Why is it wise to stand in a doorway when an earthquake strikes?

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- 3. Imagine that you are monitoring a seismograph station along the San Andreas Fault. An earthquake occurs in Mexico, and you notice that the P waves you are recording from that quake have a velocity that is less than normal. What does this tell you about the area around your seismograph station?

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