

# Directed Reading A

8.3

## Section: Earthquakes and Society

### EARTHQUAKE HAZARD

1. What is *earthquake hazard*?

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2. Which part of the continental United States has the highest earthquake-hazard level?

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### EARTHQUAKE FORECASTING

3. How is the strength of earthquakes related to how often they occur?

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4. The theory that states that sections of active faults that have had relatively few earthquakes are likely to be the sites of strong earthquakes in the future is called the \_\_\_\_\_.

5. The areas along a fault where relatively few earthquakes have taken place are called \_\_\_\_\_.

6. Weaker earthquakes that follow a stronger earthquake are known as \_\_\_\_\_.

7. Not all seismologists believe that the \_\_\_\_\_ is an accurate way to forecast earthquakes.

**Directed Reading A *continued***

**EARTHQUAKES AND BUILDINGS**

- \_\_\_\_\_ 8. The process of making older buildings more earthquake resistant is called
- a. quake proofing.
  - b. shock insulating.
  - c. mass dampening.
  - d. retrofitting.
- \_\_\_\_\_ 9. What do architects and engineers use to design and build structures to withstand earthquakes?
- a. retrofitting
  - b. gap filling
  - c. the newest technology
  - d. seismology
- \_\_\_\_\_ 10. In an earthquake-resistant building, what structures act as shock absorbers?
- a. mass dampers
  - b. base isolators
  - c. active tendon systems
  - d. cross braces
- \_\_\_\_\_ 11. The shifting weights placed in the roofs of some earthquake-resistant buildings are called
- a. mass dampers.
  - b. base isolators.
  - c. active tendon systems.
  - d. cross braces.
- \_\_\_\_\_ 12. What do engineers place between floors to counteract the pressures on the sides of buildings during earthquakes?
- a. flexible pipes
  - b. steel crossbraces
  - c. mass dampers
  - d. base isolators
13. In an earthquake-resistant building, \_\_\_\_\_ help prevent waterlines and gas lines from breaking.
14. What is a common way to retrofit an older home?
- \_\_\_\_\_
15. Explain how an active tendon system works.
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