

Directed Reading A

Section: Earthquakes and Society

EARTHQUAKE HAZARD

1. What is *earthquake hazard*?

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

EARTHQUAKE FORECASTING

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

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.

Directed Reading A *continued*

ARE YOU PREPARED FOR AN EARTHQUAKE?

16. What can you do to make your home safer *before* an earthquake starts?

17. What are some plans you can make now for things to do during an earthquake?

18. What can you do to help yourself now if waterlines, power lines, and roads are damaged during an earthquake?

19. What is the best thing to do if you are indoors *during* an earthquake?

20. What is the best thing to do if you are outside during an earthquake?
