CHAPTER 6 - EARTHQUAKES review

Completion

Complete each statement.

- 1. When friction keeps a fault in an immobile state, the fault is said to be ______.
- 2. The western coast of North America is part of a major earthquake zone called the _____
- 3. A group of interconnected faults is called a(n) _____
- 4. The fault extending along much of the length of California is called the ______.
- 5. Seismic waves that can penetrate the liquid part of the earth's core are called ______.
- 6. The last waves to be recorded by a seismograph are the _____
- 7. Seismic waves that cause rock particles to move at right angles to the direction in which the waves are traveling are called ______.
- 8. Scientists plot three intersecting circles to locate an earthquake's ______.
- 9. The amount of energy released by an earthquake is also known as its ______.
- 10. Zones of immobile rock along faults are called ______.
- 11. The slowest-moving, potentially most damaging seismic waves are called ______.
- 12. P waves and S waves are both types of ______.
- 13. An area along a fault where few earthquakes have occurred recently, but major earthquakes occurred in the past is called a(n) ______.

14. The earthquakes that do the most damage usually have a(n) ______ focus.

15. Locations on Earth's surface where no direct seismic waves from a particular earthquake can be detected are called

Matching

Match each item with its correct statement below.

- a. an area in which strong earthquakes have occurred in the past
- b. a large ocean wave that forms after a volcanic eruption, underwater earthquake, or landslide
- c. a small earthquake that may precede a larger earthquake
- 16. foreshock
- 17. seismic gap
- 18. tsunami

Match each item with its correct statement below.

- a. a magnitude scale based on the size of the fault area that moves, how far fault blocks move, and the rigidity of rocks
- b. a scale that measures earthquake intensity

- c. a tracing of earthquake motion that is recorded by a seismograph
- d. the sudden return of elastically deformed rock to its undeformed shape
- e. the fastest seismic wave; can travel through solids, liquids, and gases
- f. an instrument that records ground vibrations
- g. a seismic wave that travels along the surface of a medium
- h. the second-fastest seismic wave; can only travel through solids
- i. a seismic wave that travels through the body of a medium
- j. a magnitude scale that measures ground motion
- 19. seismogram
- 20. seismograph
- 21. Richter scale
- 22. elastic rebound
- 23. body wave
- 24. moment magnitude
- 25. surface wave
- 26. modified Mercalli scale
- 27. P wave
- 28. S wave

Short Answer

- 29. What is an earthquake?
- 30. What is a locked fault?
- 31. What is the difference between the focus and the epicenter of an earthquake?
- 32. What is another name for a compression wave or a primary wave?
- 33. What do seismologists analyze to determine the distance to the epicenter of an earthquake?
- 34. Which magnitude scale is more closely related to the cause of an earthquake than to the effect?
- 35. Where would the epicenter be of an earthquake that causes a tsunami?
- 36. During an earthquake, what is likely to happen to a building built on loose soil and rock?