

Section: What Are Earthquakes?

1. What is seismology?

2. The scientists who study earthquakes are called _____.

WHERE DO EARTHQUAKES OCCUR?

3. Where do most earthquakes take place?

4. Giant pieces of Earth's thin, outermost layer are called _____.

5. When tectonic plates move and slip past each other, they cause _____.

_____ in Earth's crust.

6. Why do earthquakes occur along faults?

WHAT CAUSES EARTHQUAKES?

Match the correct definition with the correct term. Write the letter in the space provided. Some terms will not be used.

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|---|------------------------|
| _____ 7. rock deformation that is like a stretched rubber band and leads to earthquakes | a. deformation |
| _____ 8. change in the shape of rocks in response to stress | b. plastic deformation |
| _____ 9. sudden return of elastically deformed rock to its undeformed shape | c. elastic deformation |
| _____ 10. rock deformation that is like a piece of molded clay and does not lead to earthquakes | d. plastic rebound |
| | e. elastic rebound |

11. What causes rock deformation?

12. What occurs when more pressure is applied to a rock than it can withstand?

13. During elastic rebound, energy is released that travels as seismic waves. What do the seismic waves cause?

FAULTS AT TECTONIC PLATE BOUNDARIES

14. Places where a large number of faults are located are _____.

a. convergent zones c. earthquake zones

b. divergent zones d. boundary zones

Match the correct definition with the correct term. Write the letter in the space provided.

- | | |
|---|----------------------|
| _____ 15. occurs where two plates slip past each other | a. divergent motion |
| _____ 16. occurs where two plates push together | b. convergent motion |
| _____ 17. occurs where two plates pull away from each other | c. transform motion |

18. Where do most earthquakes happen?
