

SECTION 1

Reinforcement

Forces Inside Earth

Directions: Write the term that matches each description below on the spaces provided. Then rearrange the letters in the boxes to form a word for the force that creates reverse faults.

1. This is the name for the vibrations that rocks produce when they break. _____
2. Earthquakes happen when these sections of Earth's crust move. _____
3. This force causes rocks on either side of a fault to slide past each other. _____
4. Tension pulls rocks apart and creates this kind of fault. _____ _____ _____
5. A bending and stretching rock will break when it reaches this point. _____ _____
6. Rocks on either side of this kind of fault move past each other without much upward or downward movement. _____ _____ - _____
7. Rocks above this kind of fault are forced up and over rocks below this fault. _____ _____
8. This force creates a normal fault. _____ _____ _____
9. Force that creates reverse faults: _____

Directions: Find the mistakes in the statements below. Rewrite each statement correctly on the lines provided.

10. The surface of Earth is in constant motion because of forces on the planet's surface.

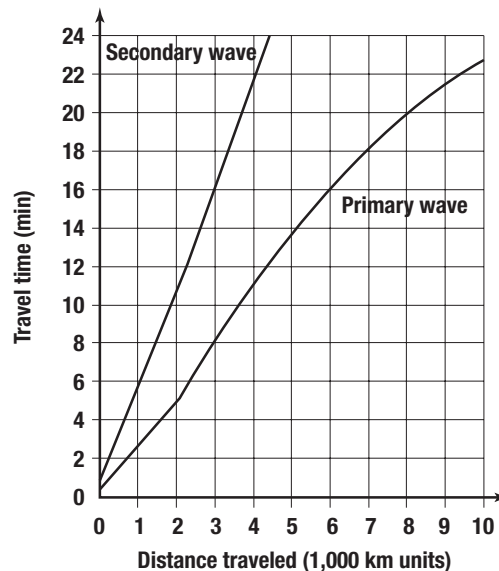
11. As rocks move past each other along a fault, their rough surfaces catch and permanently halt movement along the fault.

SECTION 2

Reinforcement

Features of Earthquakes

Directions: The graph below shows travel time in minutes and distance traveled for primary and secondary waves. Primary and secondary waves start at the same time but do not travel at the same speed. Study the graph. Use the graph to help answer the questions that follow.



- How long does it take for a primary wave to travel 2,000 km?

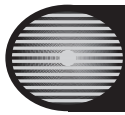
- How long does it take for a secondary wave to travel 2,000 km?

- How far does a secondary wave travel in 10 min? _____
- How far does a primary wave travel in 10 min? _____
- What happens to the time difference between primary and secondary waves as the distance traveled gets longer?

- Suppose a primary and secondary wave both travel a distance of 4,000 km before they are picked up by a seismograph. Which wave will arrive first?

- How much time lag at 4,000 km will there be between these two waves?

- Suppose both a primary and secondary wave start together and travel for 5 min. Which wave will travel farther?



Chapter Review

Earthquakes

Part A. Vocabulary Review

Directions: After each statement is a bold-faced term that has been scrambled. Complete each statement by unscrambling the term and writing it on the line provided.

1. When stress causes rocks to break, vibrations called _____ are produced.
eequaraskht
2. When tension forces pull rocks apart, a _____ occurs. **manlor lauft**
3. _____ waves cause particles in rocks to move at right angles to the direction of the waves. **sandcorey**
4. The _____ of an earthquake is the point of Earth's surface above the focus.
rentpiece
5. The measure of energy released by an earthquake is the earthquake's _____.
gaindumet
6. A scientists who studies earthquakes is a _____. **moistgiesosl**
7. At a _____, the rocks above the fault surface are forced up and over the rocks below the fault surface. **servee taluf**
8. The _____ of an earthquake is the point in Earth's interior where energy is released. **scouf**
9. By studying seismic wave information, a scientist discovered the boundary between Earth's crust and its upper mantle, which is called the Moho _____.
dustointinyic
10. A _____ is a seismic sea wave that can cause great devastation. **natsium**
11. Most destruction in an earthquake is caused by _____ waves. **farceus**
12. An instrument called a _____ is used to record seismic waves from earthquakes. **gameshipors**
13. A fault between two plates that are moving sideways past each other is called a _____ fault. **kirest-plis**
14. _____ waves cause particles in rocks to move back and forth in the same direction as the waves. **marryip**
15. Earthquakes generate energy waves called _____. **cimesis sawew**
16. Once their elastic limits are reached, rocks break and move along surfaces called _____. **staful**

Chapter Review (continued)

17. The _____ is an area where no seismic waves are detected.
washod enoz
18. Seismologists use the _____ to describe the magnitude of earthquakes. itcerhr elacs
19. A reverse fault is often found at _____ plate boundaries. gonerentcov
20. The Modified Mercalli scale describes the _____ of an earthquake using the amount of damage in a specific location. itneisnyt

Part B. Concept Review

Directions: Name the type of stress depicted in each figure and the kind of fault that results from the stress.

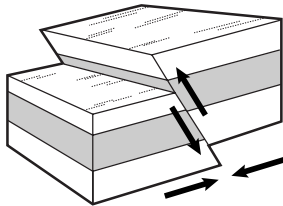


Figure 1

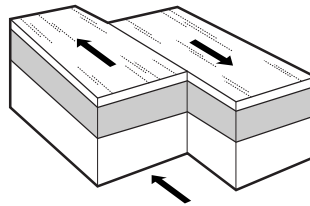


Figure 2

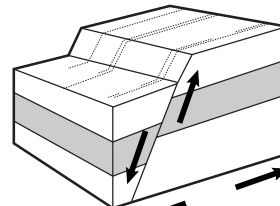


Figure 3

Stress

Fault

- | | | |
|-------------|----------|----------|
| 1. Figure 1 | a. _____ | b. _____ |
| 2. Figure 2 | a. _____ | b. _____ |
| 3. Figure 3 | a. _____ | b. _____ |

Directions: Answer the following questions on the lines provided.

4. How have seismic wave studies helped scientists determine the structure of Earth's interior?

5. List two ways you can make your home safer during an earthquake.
