

#### **STUDY GUIDE FOR CONTENT MASTERY**

# **SECTION 19.1** Forces Within Earth, continued

*In your textbook, read about the different types of faults.* **For each item in Column A, write the letter of the matching item in Column B.** 

Column A	Column B	
	fault	
	fault plane	
<b>10.</b> Fracture caused by horizontal shear <b>c.</b>	normal fault	
<b>11.</b> Famous California strike-slip fault <b>d</b>	reverse fault	
<b>12.</b> Fracture caused by horizontal tension	<b>e.</b> San Andreas	
<b>13.</b> Fracture along which movement occurs	<b>f.</b> strike-slip fault	
<b>14.</b> Fault surface along which movement takes place		

In your textbook, read about the different kinds of seismic waves.

Complete the table by filling in the type or types of seismic waves described.

### **Seismic Waves**

Description	Type of Seismic Wave
<b>15.</b> Causes rock to move both up and down and from side to side	
<b>16.</b> Causes rock to move at right angles to the direction in which the wave travels	
<b>17.</b> Squeezes and pulls rock in the same direction as the wave travels	
<b>18.</b> Can pass through Earth's interior	
<b>19.</b> Travels only along Earth's surface	

#### Seismic Waves and Earth's Interior **SECTION 19.2**

In your textbook, read about seismometers and clues to Earth's interior. Use each of the terms below to complete the following statements.

mass	seismometer	seismogram	frame
<b>1.</b> A is an instrument that records earthquake vibrations.			
<b>2.</b> All seismom	eters include a	susp	ended from a wire.

- **3.** A paper or computer record of earthquake vibrations is called a \_\_\_\_\_
- **4.** All seismometers include a \_\_\_\_\_ \_\_\_\_\_ that is anchored to the ground and vibrates during an earthquake.

## For each statement below, write true or false.

**5.** Seismic waves change speed and direction when they encounter different materials. **6.** P-waves travel through Earth's mantle. **7.** S-waves do not travel through Earth's mantle. 8. Surface waves are the first to arrive at a seismic facility. **9.** P-waves are bent when they strike the core. 10. On seismograms, seismic waves recorded from more distant facilities are closer together than those recorded from facilities close to the epicenter. **11**. S-waves do not enter the core because they cannot travel through solids. **12.** Seismologists have reasoned that Earth's outer core must be liquid based on the disappearance of S-waves. **13.** Studies of how waves reflect deep inside Earth show that Earth's inner core is solid. **14.** The P-wave shadow zone does not receive direct P-waves.

Date