

Glencoe Science Earth Science Chapter 19 Earthquakes

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ı. epicenter	point on Earth's surface directly above the focus of an earthquake
2. fault	fracture or system of fractures in Earth's crust that occurs when stress is applied too quickly or stress is too great; can form as a result of horizontal compression (reverse fault), horizontal shearing (strike-slip fault), or horizontal tension (normal fault)
3. focus	point of the initial fault rupture where an earthquake originates that usually lies at least several kilometers beneath the Earth's surface
4. magnitude	measure of the energy released during an earthquake, which can be described using the Richter scale
5. modified Mercalli scale	measures earthquakes on a scale from I to XII; the higher the number, the greater damage the earthquake has caused
6. moment magnitude scale	scale used to measure earthquake magnitude - taking into account the size of the fault rupture, the rocks' stiffness, and amount of movement along the fault - using values that can be estimated from the size of several different types of seismic waves
7. primary wave	seismic wave that squeezes and pulls rocks in the same direction that the wave travels, causing rock particles to to move back and forth
8. Richter scale	Numerical scale used to measure the magnitude of an earthquake, using values based on the size of the earthquake's largest seismic waves
 secondary wave 	seismic wave that causes rock particles to move at right angles to the direction of the wave
10. seismic gap	place along an active fault that has not experienced an earthquake in a long time
11. seismogram	record produced by a seismometer that can provide individual tracking of each type of seismic wave
12. seismometer	instrument used to measure horizontal or vertical motion during an earthquake
13. strain	deformation of materials in response to stress
14. stress	forces per unit area that acts upon a material (compression - pushing together, tension - pulling apart, shearing - side by side)
15. surface wave	seismic wave that moves in two directions as ti passes through rocks, causing he ground to move both up and down and from side to side

16. **tsunami** large, powerful ocean wave generated by the vertical motions of the seafloor during an earthquake; in shallow water, can form huge, fastmoving breakers exceeding 30 m in height that can damage coastal areas