

Glencoe Earth Science, Chapter 17

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Alfred Wegener	A German scientist who proposed the theory of continental drift
2. asthenosphere	It's the soft part of the mantle, that moves very slowly (convection). Big pieces of the lithosphere move onto of this layer.
3. chemical layers	Crust, Mantle, Core; defined by what elements they are made out of
4. continental drift	Wegener's hypothesis that Earth's continents were joined as a single landmass, called Pangaea, that broke apart about 200 million years ago and slowly moved to their present positions.
5. convection	Heat transferred by the movement of fluids- liquids and gases
6. convection current	Cycle of heating, rising, cooling, sinking that makes plates move.
7. convergent boundary	Place where two of Earth's tectonic plates are moving toward each other; is associated with trenches, islands arcs, and folded mountains.
8. divergent boundary	Place where two of earth's tectonic plates are moving apart; is associated with volcanoism, earthquakes, and high heat flow, and is found primarily on the seafloor.
9. lithosphere	A rigid layer made up of the uppermost part of the mantle and the crust
10. magnetometer	Device used to map the ocean floor that detects small changes in magnetic fields.
n. mid ocean ridge	An underwater moutain chain where new ocean floor is formed
12. Pangaea	ancient landmass made up of all the continents that began to break apart about 200 million years ago
13. physical layers	layers of the Earth based on PHYSICAL properties, acting rigid or not (include the lithosphere, asthenosphere, outer core, inner core)
14. ridge push	Techtonic process associated with convection currents in Earth's mantle that occurs when the weight of an elevated ridge pushes an oceanic plate toward a subduction zone.
15. rift valley	Long, narrow depression that forms when continental crust begins to separate at a divergent boundary.
16. seafloor spreading	Hess's theory that new ocean crust is formed at mid-ocean ridges and destroyed at deepsea trenches; occurs in a continuous cycle of magma intrusion and spreading.

17. slab pull	tectonic process associated with convection currents in Earth's mantle that occurs as the weight of the subducting plate pulls the trailing lithosphere into a subduction zone.
18. Sonar	technique of using sound waves to measure distance. SOund Navigation And Ranging, determined the ocean floor wasn't flat
19. subduction	process by which one tectonic plate slips beneath another tectonic plate.
20. theory of plate tectonics	States that Earth's crust and upper mantle are broken into plates, which are huge rock slabs that move in different directions and at different rates over Earth's surface.
21. transform boundary	Place where two tectonic plates slide horizonatally past each other that is characterized by long faults and shallow earthquakes.