

Vocabulary list 5 (chapter 3) Earth Science

1. **crust**- the layer of rock that forms the Earth's outer surface.
2. **mantle**- the layer of hot, solid material between the Earth's crust and core.
3. **lithosphere**- a rigid layer made up of the uppermost part of the mantle and the crust.
4. **asthenosphere**- the soft layer of the mantle on which the lithosphere floats.
5. **outer core**- a layer of molten iron and nickel that surrounds the inner core of Earth.
6. **inner core**- a dense sphere of solid iron and nickel at the center of the Earth.
7. **density**- the amount of mass of a substance in a given volume; mass per unit volume
8. **convection current**- the movement of a fluid, caused by differences in temperature, that transfers heat from one part of the fluid to another.
9. **continental drift**- the hypothesis that the continents slowly move across Earth's surface.
10. **Pangaea**-The name of the single landmass that broke apart 200 million years ago and gave rise to today's continents.
11. **mid-ocean ridge**- An undersea mountain chain where new ocean floor is produced.
12. **sea-floor spreading**- The process by which molten material adds new oceanic crust to the ocean floor.
13. **deep-ocean trench**- a deep valley along the ocean floor beneath which oceanic crust slowly sinks toward the mantle.
14. **subduction**- The process by which oceanic crust sinks beneath a deep-ocean trench and back into the mantle at a convergent plate boundary.
15. **plate**- a section of the lithosphere that slowly moves over the asthenosphere, carrying pieces of continental and oceanic crust.
16. **plate tectonics**-The theory that pieces of the Earth's lithosphere are in constant motion, driven by convection currents in the mantle.
17. **divergent boundary**-A plate boundary where two plates move away from each other.
18. **rift valley**- a deep valley that forms where two plates move apart.
19. **convergent boundary**- a plate boundary where two plates move toward one another.
20. **transform boundary**-a plate boundary where two plates move past each other in opposite directions.