Name _____ Date _____

Earth Science - Chapter 9 Vocabulary

continental volcanic arc	**slab-pull**	**ridge push**
continental drift	**paleomagnetism**	**trench**
rift valley	**volcanic island arc**	**divergent boundary**
hot spot	**convective flow**	**convergent boundary**
transform fault boundary	**oceanic ridge**	**reverse polarity**
normal polarity	**plate tectonics**	**seafloor spreading**
plate	**mantle plume**	**subduction zone**
Pangaea		

Matching

Match each definition with a word.

1. _____ boundary formed when two plates slide past each other in the same direction at different speeds, or slide past each other in opposite directions; the San Andreas Fault is an example.

2. _____ a mass of hotter-than-normal mantle material that ascends toward the surface, where it may lead to igneous activity

3. _____ a chain of volcanic islands generally located a few hundred miles from a trench where subduction of one oceanic slab beneath another is occurring.

4. _____ a magnetic field opposite to that which exists at present.

5. _____ an area in the middle of a lithospheric plate where magma rises from the mantle and erupts at the Earth's surface. Volcanoes sometimes occur above a hot spot.

6. _____ a mechanism that may contribute to plate motion; It involves the oceanic lithosphere sliding down the oceanic ridge under the pull of gravity.

7. _____ A long,deep, narrow area like a valley or canyon in the ocean floor.

8. _____ The study of changes in Earth's magnetic field, as shown by patterns of magnetism in rocks that have formed over time.

9. _____ This is where two plates are moving away from each other. New crust is formed here.

10. _____ A plate boundary where two plates move toward each other.

11. _____ deep valley that forms where 2 (divergent) plates move apart

12. _____ a large section of Earth's oceanic or continental crust and rigid upper mantle (lithosphere) that moves around on the asthenosphere.

13. _____ mountains formed in part by volcanic activity caused by the subduction of oceanic lithosphere beneath a continent.

14. _____ the motion of matter resulting from changes in temperature

15. _____ The theory that the earth's outer shell is composed of a number of large, unanchored plates, or slabs of rock, whose constant movement explains

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earthquakes and volcanic activity.

16. _____ a mechanism that contributes to plate motion in which cool, dense oceanic crust sinks into the mantle and "pulls" the trailing lithosphere along

17. _____ the theory that magma from Earth's mantle rises to the surface at mid-ocean ridges and cools to form new seafloor

18. _____ A continuous elevated zone on the floor of all major ocean basins; the rifts at the crests of the ridges represent divergent plate boundaries.

19. _____ Wegener's hypothesis that all continents were once connected in a single large landmass that broke apart about 200 million years ago and drifted slowly to their current positions.

20. _____ a magnetic field that is the same as that which exists at present

21. _____ a. The large landmass ("supercontinent") that is believed to have connected all of the continents on earth about 225 million years ago.
b. The single giant landmass that existed more that 200 million years ago and that gave rise to the present-day continents.

22. _____ Where two lithospheric plates come together, one riding over the other. Most volcanoes on land occur parallel to and inland from the boundary between the two plates

Answer Key

1. transform fault boundary
2. mantle plume
3. volcanic island arc
4. reverse polarity
5. hot spot
6. ridge push
7. trench
8. paleomagnetism
9. divergent boundary
10. convergent boundary
11. rift valley
12. plate
13. continental volcanic arc
14. convective flow
15. plate tectonics
16. slab-pull
17. seafloor spreading
18. oceanic ridge
19. continental drift
20. normal polarity
21. Pangaea
22. subduction zone