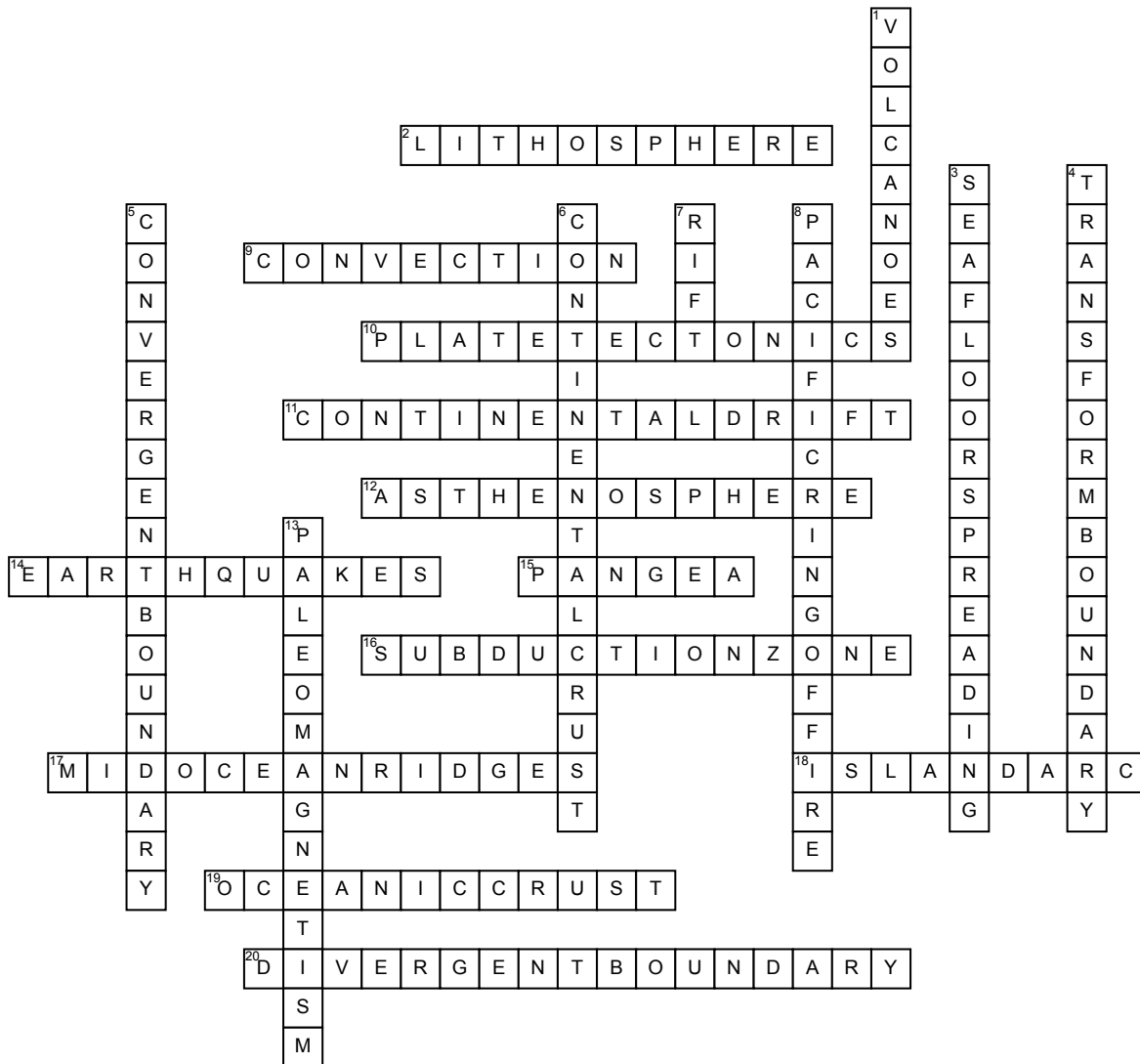


# PLATE TECTONICS



## Across

2. the solid, outer layer of Earth that consists of the crust and the rigid upper part of the mantle.  
 9. the movement of tectonic plates  
 10. the theory that explains how large pieces of the lithosphere, called plates, move and change shape  
 11. the hypothesis that states that the continents once formed a single landmass, broke up, and drifted to their present locations.  
 12. the solid, plastic layer of the mantle beneath the lithosphere.  
 14. when tectonic plates move, sudden shifts can occur along their boundaries.  
 15. the supercontinent that was once a big landmass

16. the place where two lithosphere plates come together, one on top of the other  
 17. a long, undersea mountain that has a steep, narrow valley at its center, that forms as magma rises from the asthenosphere, and that creates new oceanic lithosphere ( sea floor ) as tectonic plates move apart.  
 18. a curved chain of volcanic islands located at a tectonic plate margin, typically with a deep ocean trench  
 19. dense and made up of rock that is rich in iron and magnesium.  
 20. move away from each other  
**Down**  
 1. form when plate motions generate magma that erupts on Earth's surface.

3. the process by which new oceanic lithosphere ( sea floor ) forms as magma rises to Earth's surface and solidifies at a mid-ocean ridge.  
 4. slide past each other horizontally  
 5. move towards each other  
 6. low density and is made up of rock that is rich in silica.  
 7. the valley at the center of the ridge was a crack in Earth's crust.  
 8. a major area in the basin of the Pacific Ocean where a large number of earthquakes and volcanic eruptions occur.  
 13. the study of the alignment of magnetic minerals in a rock, specifically as it relates to the reversal of Earth's magnetic poles.