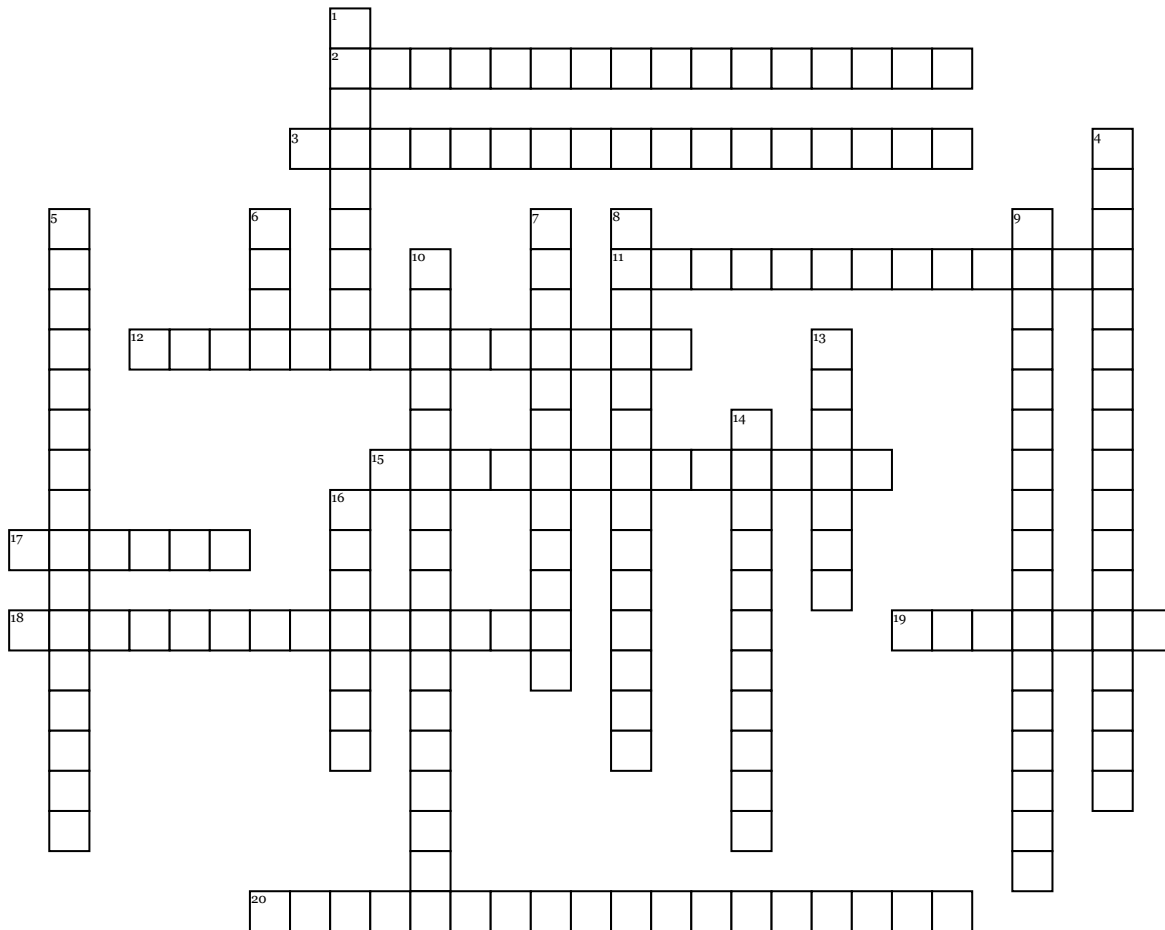


# Plate Tectonics



## **Across**

- 2.** the relatively thick of the earth's crust that forms the large landmass  
**3.** the boundary between tectonic plates that are sliding past each other horizontally  
**11.** the solid, plastic layer of the mantle beneath the lithosphere  
**12.** the lithosphere of the earth is divided into a small number of plates which float on and travel independently over the mantle and much of the earth's seismic activity occurs at the boundaries of these plates  
**15.** a long, undersea mountain chain that has a steep, narrow valley at its center, that forms as magma rises from the asthenosphere  
**17.** a ring-shaped coral reef, island, or series of islands

- 18.** the theory that explains how large pieces of the lithosphere

- 19.** a piece of lithosphere that has a unique geologic history and that may be part of a larger piece of lithosphere  
**20.** the boundary between tectonic plates that are colliding

## **Down**

- 1.** a process by which material is added to tectonic plate or a landmass  
**4.** the boundary between tectonic plates that are moving away from each other  
**5.** the hypothesis that states that the continents once formed a single landmass  
**6.** a crack, split, or break in something  
**7.** about 4 miles thick, composed of several layers not including the overlying sediment

- 8.** the study of the alignment of magnetic minerals in rock

- 9.** the process by which new oceanic lithosphere (sea floor) forms as magma rises to earth's surface and solidifies at a mid-ocean ridge

- 10.** a major area in the basin of the pacific ocean where a large number of earthquakes and volcanic eruptions occur  
**13.** the supercontinent that formed 300 million years ago and that began to break up beginning 250 million years ago  
**14.** the solid, outer layer of earth that consists of the crust and the rigid upper part of the mantle  
**16.** the process by which earth's crust breaks apart