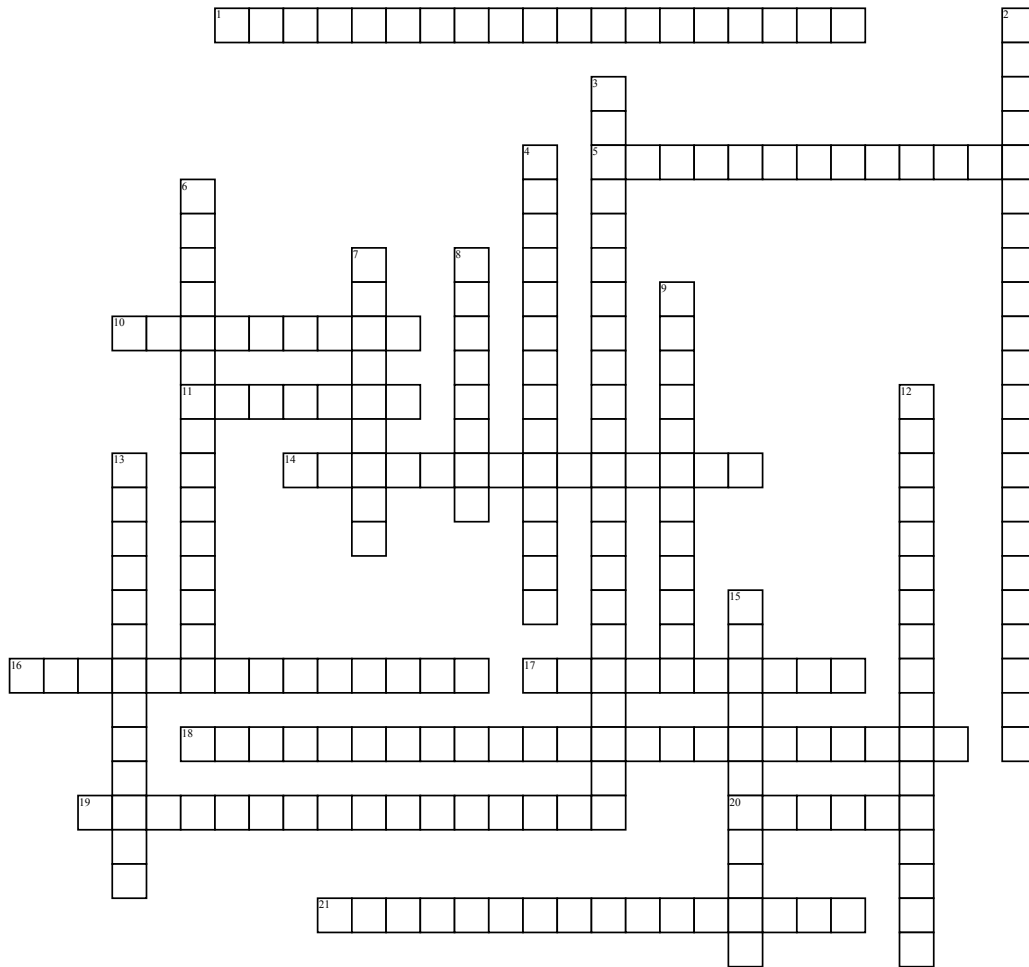


# Plate Tectonics



**Across**

- 1. what heats Earth's interior
- 5. the man who came up with the Plate Tectonic Theory
- 10. rising mantle material at mid-ocean ridges creates the potential for plates to move away from the ridge with a force
- 11. this helped develop the Plate Tectonic Theory
- 14. a state in which magnetized objects, such as compass needles, will orient themselves to point north
- 16. the mountain ranges in the middle of the oceans
- 17. the circulation of material caused by differences in temperature and density

- 18. form where two plates collide. The denser plate sinks below the more buoyant plate in a process called subduction
  - 19. a state in which magnetized objects would reverse direction and orient themselves to point south
  - 20. all the continents were once part of a supercontinent
  - 21. occurs and the magnetic field reverses direction
- Down**
- 2. forms where two plates separate
  - 3. forms where two plates slide past each other

- 4. states that Earth's surface is made of rigid slabs of rock, or plates, that move with respect to each other
- 6. what is one of the smallest plate tectonic
- 7. convection currents in the mantle produce a force that causes motion
- 8. as a slab sinks, it pulls on the rest of the plate with a force
- 9. what is the largest plate tectonic
- 12. the process by which new oceanic crust forms along a mid-ocean ridge and older oceanic crust moves away from the ridge
- 13. layer of Earth below the lithosphere
- 15. the cold and rigid outermost rock layer

**Word Bank**

- |                  |                           |                          |                   |
|------------------|---------------------------|--------------------------|-------------------|
| asthenosphere    | convection                | radioactive elements     | reversed polarity |
| normal polarity  | plate tectonics           | Pangea                   | magnetic reversal |
| lithosphere      | seafloor spreading        | Fossils                  | basal drag        |
| slab pull        | transform plate boundary  | Juan de Fuca Plate       | ridge push        |
| Alfred Wegener   | convergent plate boundary | divergent plate boundary | Pacific Plate     |
| mid-ocean ridges |                           |                          |                   |