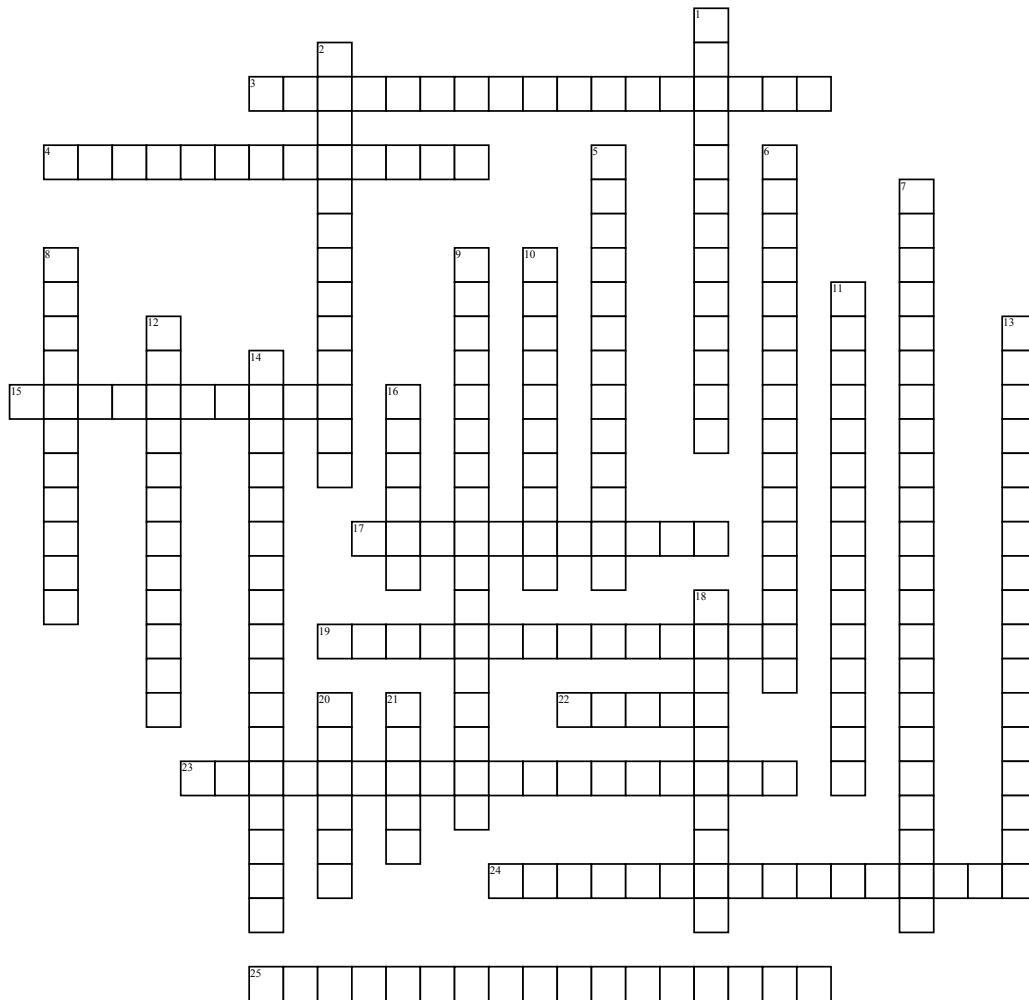


PLATE TECTONICS



Across

3. a chain of volcanoes that develop parallel to a trench
 4. form at continental-continental convergent boundaries
 15. the transfer of heat by the movement of a fluid
 17. a device that is used to record earthquake waves
 19. the theory that pieces of Earth's lithosphere are in constant motion, driven by convection currents in the mantle
 22. surface along which rocks move when they pass their elastic limit and break
 23. a plate boundary where two plates move toward each other
 24. the hypothesis that the continents slowly move across Earth's surface
 25. when two tectonic plates slide past each other horizontally

Down

1. an undersea mountain chain where new ocean floor is produced
 2. A researcher that discovered the continental drift.
 5. the soft layer of the mantle on which the lithosphere floats
 6. The thick part of the earth's crust that forms the large landmasses
 7. mountains formed in part by igneous activity associated with subduction of oceanic lithosphere beneath a continent
 8. the solid, outer layer of the earth that consists of the crust and the rigid upper part of the mantle
 9. the process by which molten material adds new oceanic crust to the ocean floor
 10. a geological process in which one edge of a crustal plate is forced sideways and downward into the mantle below another plate

11. deep valley along the ocean floor beneath which oceanic crust slowly sinks towards the mantle
 12. the uppermost layer of the oceanic portion of a tectonic plate.
 13. the flow that transfers heat within a fluid
 14. a plate boundary where two plates move away from each other
 16. large supercontinent that existed 250 million years ago
 18. A deep valley that forms where two plates move apart.
 20. a depression in the seafloor produced by subduction process
 21. a mass of molten rock formed at the depth, including dissolved gases and crystals

Word Bank

| | | | | |
|--------------------------|--------------------|--------------------|---------------------|---------------------|
| mountain range | divergent boundary | asthenosphere | Trench | convection |
| Continental Volcanic Arc | seismograph | convection current | Continental Crust | continental drift |
| Volcanic Island Arc | transform boundary | OCEANIC CRUST | plate tectonics | deep-ocean trench |
| rift valley | subduction | Alfred Wegener | sea-floor spreading | convergent boundary |
| lithosphere | mid-ocean ridge | mAGMA | fAULT | Pangea |