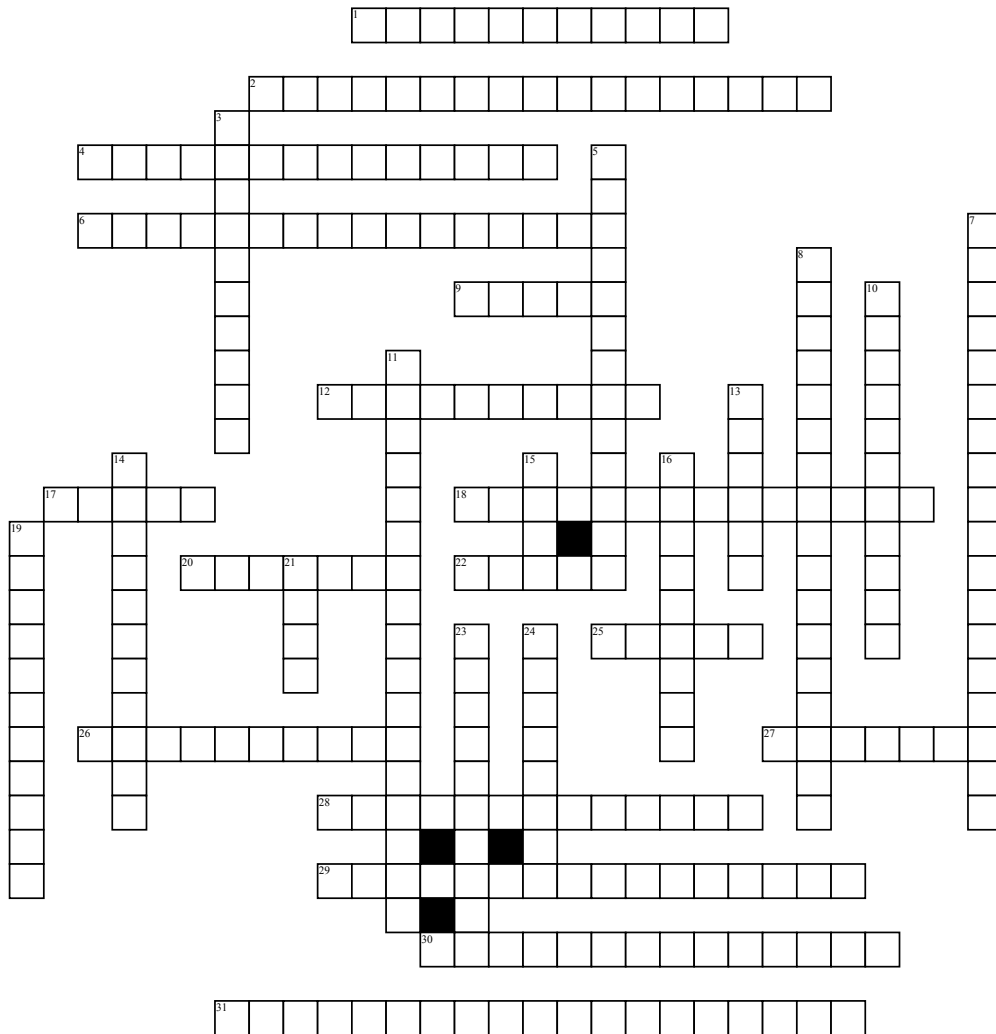


Name: \_\_\_\_\_

# Rileys Set 1 Words



**Across**

- 1. the rigid outer part of earth made up of rocks in the crust attached to the upper part of the mantle.
- 2. the addition of new rock to plates moving apart under the oceans.
- 4. the continuous circular pattern of fluids as they are heated and cooled.
- 6. The idea that a past supercontinent split apart into pieces, which drifted over time to their present locations
- 9. a seismic wave that travels only through solids, vibrating at a right angle to its direction of travel; also called secondary wave
- 12. crust that lies beneath the oceans; made up of mostly basalt
- 17. the thin layer of solid rock that makes up the outermost part of earth
- 18. the theory that that earth is made up of separate, rigid plates that move slowly across the mantle
- 20. A place where molten rock, hot gasses, and solid rocks erupt through an opening in the earths crust; also a mountain that formed from these materials
- 22. the fastest seismic wave, which travels through gases, liquids, and solids; also called primary wave.
- 25. molten, or melted rock deep below the surface of earth.

- 26. the shaking of the ground that occurs when tectonic plates shift and change positions
- 27. Earths single landmass or "supercontinent" that is thought to have existed about 200 million years ago
- 28. a vast underwater mountain chain that has been built up by the addition of new rock from below two tectonic plates moving apart under the oceans
- 29. crust that makes up earth's land; made up mostly of a relatively lightweight rock called granite
- 30. a theory that lies other theories together to gave a more complete picture of natural occurrences, such as plate tectonics
- 31. a boundary between plates that are sliding past each other

**Down**

- 3. almost melted; used to describe mantle rocks below the lithosphere.
- 5. the layer of semimolten mantle rock that lies directly below the lithosphere.
- 7. A boundary between plates that are moving toward each other or colliding
- 8. A boundary between plates that are moving away from each other or pulling apart

- 10. a vibration that travels through earth and is produced by earthquakes and volcanic eruptions
- 11. The addition of new rock to plates moving apart under the oceans.
- 13. the thick layer of rock and molten rock that lies beneath the earth's crust
- 14. a seismic wave that is trapped near the surface of earth
- 15. molten rock that flows up onto the surface of earth
- 16. a scientist that studies Earths origin, history, structure, composition, and processes
- 19. a long narrow, deep valley on the ocean floor trenches are the deepest parts of the ocean
- 21. the central part of Earth that lies beneath the mantle and is made up of an outer , liquid part and inner, solid part
- 23. a process that occurs when tectonic plates converge and one plate sinks or slides under the other.
- 24. a seismic wave that travels through the interior of earth; two types are p waves and s waves.

**Word Bank**

- |                      |                     |                    |                   |           |                 |
|----------------------|---------------------|--------------------|-------------------|-----------|-----------------|
| earthquake           | seafloor spreading  | surface wave       | core              | body wave | lava            |
| lithosphere          | asthenosphere       | seafloor spreading | unifying theory   | p wave    | geologist       |
| plate tectonics      | Convergent boundary | continental crust  | ocean trench      | s wave    | convective flow |
| semi-molten          | subduction          | Pangaea            | continental drift | magma     | seismic wave    |
| transform boundaries | mid-ocean ridge     | mantle             | ocean crust       | Volcano   | crust           |
| Divergent boundary   |                     |                    |                   |           |                 |