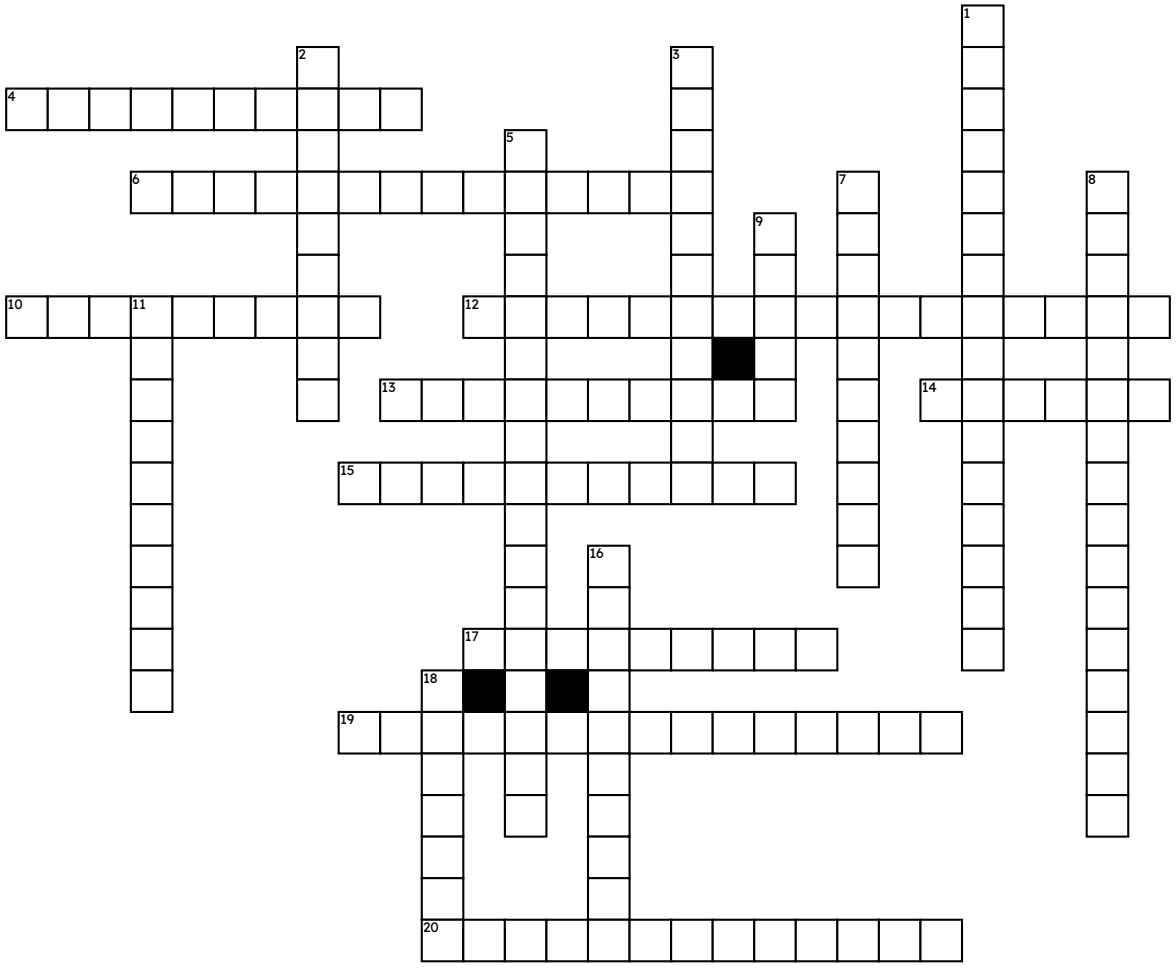
Name: _____ Date: _____

Plate Tectonics



Across

4. The process that takes place at convergent boundaries by which one tectonic plate moves under another tectonic plate and sinks into the mantle as the plates converge

6. Theory that Earth's crust and upper mantle are broken into plates that float and move around on plastic-like layer of the mantle

10. Opening in Earth's surface that erupts sulfurous gases, ash, and lava; can form at Earth's plate boundaries, where plates move apart or together, and at hot spots

12. The ocean floor sinking deep underwater canyons

13. The shaking and trembling that results from the movement of rock beneath Earth's surface

14. Breaks in Earth's crust where rocks have slipped past each other

15. Rigid layer of Earth about 100km thick, made of the crust and a part of the upper mantle

17. Places where plates slide sideways past each other

19. Where the forces of plate motion push or pull the crust so much that it breaks

20. Plastic-like layer of Earth on which the lithospheric plates float and move around

Down

1. Wegener's hypothesis that all continents were once connected in a single, large landmass that broke apart about 200 million years ago and drifted slowly to their current positions

2. A linear feature that exists between two tectonic plates that are moving away from each other

3. A wave generated by an Earthquake

5. Current in Earth's mantle that transfers heat in Earth's interior and is the driving force for plate tectonics

7. A deep boundary that forms along the divergent boundary

8. A well tested concept that explains a wide range of observations.

9. A large section of Earth's oceanic or continual crust and rigid upper mantle that moves around on the asthenosphere

11. An actively deforming region where two or more tectonic plates or fragments of the lithosphere move toward one another and collide

16. Formed by the many volcanoes that rim the pacific ocean

18. Supercontinent that began to break apart 225 million years ago.