Name:_____ Date:_____

Plate Tectonics

Video: Continents Adrift

Using the following words, fill in the blank lines to answer the points mentioned in the video.

- ash
- content
- continental drift
- convergent
- convergent
- convergent boundary
- dive beneath
- divergent boundary
- earthquake
- erupt
- fault
- fire
- fossils
- hot spot
- lithosphere
- magma
- magma chamber
- mantel
- mid-continent drift
- Mountain ranges
- mountains
- Pangaea
- plate tectonics
- South America
- subduction
- subduction zone
- tectonic plates
- the sea floor is spreading
- Transform boundary
- volcanoes
- year

1. Africa and _____ _____ coastlines seem to fit together easily.
2. German scientist, Alfred Wegener, called his early content :_____
3. The theory of moving contents was called:_____ _____
4. Evidence that the continents were once attached together are the _____ of plants and animals.
5. What was found at the bottom of the ocean? _____-_____ _____
6. Why are the rocks on the ocean floor gradually becoming older the further away they are from the underwater ridge? _____ _____.
7. When scientist mapped earthquakes that occurred all over the world, they found that the earth was broken up into sections they call :_____ _____.
8. The theory related to these plates is called _____ _____.
9. The solid portion of the mantel and the earths crust forms the Earth's outer shell called the:_____.
10. Each plate carries a continent, and they are moving 1-2 inches a _____.
11. Materials in the _____ are moving which causes the plates to move above them.
12. When plates are moving in opposite directions, this is called a:_____ _____.
13. When plates collide together, this is called a:_____ _____.
14. When plates slide past each other, this is called a:_____ _____.
15. The mid-ocean ridge below the Atlantic Ocean is an example of a divergent boundary between the North American plate and the Eurasian plate. Scientists believe that as the plates

move apart, the mantle material we call_____ rises from below and fills the gap. Plate material is created.

16. Plate material is destroyed at a _____ boundary. At this boundary, two plates are moving towards each other. One plate is heavier and will _____ _____ the other plate. The leading edge of the diving plate is consumed back into the mantle. This process is called subduction and the area where it occurs is called the_____ _____ .
17. A crack in the earth's crust is called a _____ . One side of the crack will move in one direction, while the other side will move in another direction. When one side of the fault moves in the opposite direction of the other side of the fault, this causes an _____.
18. Active _____ also occur along plate boundaries. The 'ring of _____' refers to the circular chain of volcanoes around the Pacific plate, and has the worlds most destructive volcanoes.
19. Most volcanoes occur around _____ zones. In this area, magma rises in large globs into the upper plate. Eventually the globs stop rising and some of them may form a _____ _____ . When pressure builds, magma sometimes finds its way to the surface where it can _____ , spewing lava, gas, volcanic _____ and debris.
20. Some volcanoes, like the ones in the Hawaiian Islands, occur thousands of miles from the nearest plate boundary. Scientists believe that these volcanoes are caused by a _____ _____ in the Earth's mantle. Hot spots occur when magma finds its way through the Earth's crust where cold ocean water causes it to harden. More magma follows, adding to the formation of an underwater volcanic dome. The dome becomes larger over thousands of years and may eventually rise above sea level. Hawaii and many islands around the world were formed just this way.
21. Like volcanoes, _____ are also formed by plate movement. Most mountain ranges are located along_____ boundaries.
22. _____ _____ are formed when two _____ plates of similar weight collide together, they squeeze up together and under tremendous pressure the layers of the Earth's surface are compressed and folded, rising high into the air.