

1. 4.6 billion years ago, the Earth is created from what?

**debris left over from the formation of the sun**

2. The heaviest elements, including lead and nickel, sink in the early molten Earth to form the core.

3. The lighter elements, including oxygen and silicon rise towards the surface and erupt in volcanoes as molten rock.

4. Most scientists believe that the water that formed our oceans came from many, many meteors, which contained water.  
**meteoric bodies, meteoroids, asteroids**

5. How old was Earth believed to be when the first early, relatively stable land masses formed?

**4.4 bya (billion years ago)**

6. What continent is believed to be the site of the earliest continental nuclei on Earth?

**(South) Africa**

7. What type of rock formed the first continents?

**granite**

8. The giant jig saw of interlocking pieces that make up Earth's crust are called what?

**tectonic plates (or continental plates)**

9. The tectonic plates "float" on what layer of Earth?

**mantle (or asthenosphere)**

10. Evidence for the theory of continental drift was first proposed in 1912 by what German Scientist?

**Alfred Lothar Wegener**



11. When Wegener first proposed his theory of continental drift, why did the scientific community reject his ideas?

**He didn't know HOW continents moved**

12. Heat escaping from the core creates convection currents in the next layer of the Earth, the mantle.

13. How many tectonic plates can be identified on Earth today?

**over a dozen (over 12)**

14. Where does old seafloor sink back into the Earth to be recycled?

**subduction zones (or deep-ocean trenches)**

15. The world's last supercontinent is known as **Pangea**.

**not Vaalbara or Rodinia**

16. How many years ago did the supercontinent Pangaea begin breaking up?

**250 mya (million years ago)**

17. As plates move across the Earth, crust and rock is dragged back down into the Earth at what type of zones?

**subduction zones**

18. When continental crust collides with continental crust at convergent plate boundaries and no subduction occurs, what begins to form?

**mountains**

19. The Himalaya Mountains formed as a result of the collision of what two tectonic plates?

**Indian Plate and Eurasian Plate**



**Eurasia = Europe + Asia**