

**Earth Science: National Geographic – Colliding Continents Video Worksheet**

1. List the 7 continents. \_\_\_\_\_  
 \_\_\_\_\_
2. 4.6 billion years ago, the Earth is created from what? \_\_\_\_\_
3. The heaviest elements, including \_\_\_\_\_ and \_\_\_\_\_, sink in the early molten Earth to form the \_\_\_\_\_.
4. The lighter elements, including \_\_\_\_\_ and \_\_\_\_\_ rise towards the surface and erupt in volcanoes as molten rock.
5. Most scientists believe that the water that formed our oceans came from many, many \_\_\_\_\_, which contained water.
6. How old was Earth believed to be when the first early, relatively stable land masses formed? \_\_\_\_\_ years old
7. What continent is believed to be the site of the earliest giant continental land mass on Earth? \_\_\_\_\_
8. What type of rock formed the first continents? \_\_\_\_\_
9. As radioactive uranium decays it turns into what stable element? \_\_\_\_\_
10. Why is granite less dense than other rock in Earth’s mantle? \_\_\_\_\_
11. The ‘giant jigsaw puzzle’ of interlocking pieces that make up Earth’s crust are called what? \_\_\_\_\_
12. The tectonic plates “float” on what layer of Earth? \_\_\_\_\_
13. Evidence for the theory of continental drift was first proposed in 1912 by what German Scientist? \_\_\_\_\_
14. When Wegener first proposed his theory of continental drift, why did the scientific community reject his ideas? \_\_\_\_\_

15. Heat escaping from the core creates \_\_\_\_\_ in the next layer of the Earth, the \_\_\_\_\_.
16. How many tectonic plates can be identified on Earth today? \_\_\_\_\_
17. Where does old seafloor sink back into the Earth to be recycled? \_\_\_\_\_
18. The world's last supercontinent is known as \_\_\_\_\_.
19. How many years ago did the supercontinent Pangaea begin breaking up?  
\_\_\_\_\_ years ago
20. During the break-up of Pangaea, South America split off from \_\_\_\_\_, North America split off from \_\_\_\_\_, and Australia split off from \_\_\_\_\_ and drifted north.
21. As plates move across the Earth, crust and rock is dragged back down into the Earth at what type of zones? \_\_\_\_\_ zones
22. When continental crust collides with continental crust at convergent plate boundaries and no subduction occurs, what begins to form? \_\_\_\_\_
23. The formation of the Alps is the direct result of collision between what two continents? \_\_\_\_\_ and \_\_\_\_\_
24. The Himalayan mountain range formed as a result of the collision of what two tectonic plates? \_\_\_\_\_ and \_\_\_\_\_
25. The Grand Canyon is located in what state? \_\_\_\_\_
26. How long and wide is the Grand Canyon? \_\_\_\_\_ miles long, \_\_\_\_\_ miles wide
27. Describe the relationship between the age of rock layers and the depth travelled into the Grand Canyon. \_\_\_\_\_
28. 250 million years ago the Grand Canyon began to form when what two plates began to collide? \_\_\_\_\_ and \_\_\_\_\_