

## Exploring Plate Tectonics

Name \_\_\_\_\_

### SITE: Brain POP - Plate Tectonics

1. \_\_\_\_\_ was the name of the supercontinent that existed millions of years ago.
2. The surface, or \_\_\_\_\_, of the Earth is broken into about \_\_\_\_\_ plates that float on the liquid \_\_\_\_\_.
3. When the plates move, the \_\_\_\_\_ shift along with them. We don't notice the ground moving because they only move a few \_\_\_\_\_ each year.
4. Volcanoes, \_\_\_\_\_, \_\_\_\_\_, and trenches occur at active \_\_\_\_\_ between the plates.
5. Divergent boundaries are where plates are moving \_\_\_\_\_ and new \_\_\_\_\_ is created by liquid rock pushing up from the mantle.
6. Convergent boundaries are where plates are moving \_\_\_\_\_ each other. Sometimes one plate \_\_\_\_\_, or is subducted under another.
7. Transform boundaries are where plates \_\_\_\_\_ horizontally past one each other and cause \_\_\_\_\_.
8. The plates are always \_\_\_\_\_ slowly changing the face of the \_\_\_\_\_.

### SITE: Puzzles of the Earth

Go to Earth Structures to start your tour of the world of plate tectonics! Click the puzzle piece at the bottom of each page to navigate your way through the world of plate tectonics.

1. What are the three main parts of the earth? Give a brief description for each.
2. The plates that make up the crust fit together like pieces of a \_\_\_\_\_.
3. Which plate do we live on? \_\_\_\_\_ (Hint: Earth Map)
4. We live on the earth's outermost layer. What is it called? \_\_\_\_\_
5. Match each description using a C for continental plates or O for oceanic plates.  
\_\_\_\_\_ Crust that "carries" the ocean  
\_\_\_\_\_ Crust that "carries" the continents; may also contain oceans  
\_\_\_\_\_ Less dense and tends not to subduct  
\_\_\_\_\_ More dense and tends to be subducted
6. How do plates move? Write a description using the terms magma, plates, and convection currents.
7. What happens at a convergent boundary? Explain and draw a diagram!

8. What happens in each situation?  
Continental plate meets oceanic plate -  
Two continental plates meet -  
Two oceanic plates meet -
9. What happens at a divergent boundary? Explain and draw a diagram!
10. What is sea-floor spreading?
11. Describe transform plate movement. Explain and draw a diagram!
12. What are three geographic features that may be found at plate boundaries?

**SITE: ZOOM Plate Tectonics**

1. Who first proposed the idea of continental drift? \_\_\_\_\_
2. What did he name the gigantic supercontinent that existed 200 million years ago? \_\_\_\_\_
3. When did it begin to break up? \_\_\_\_\_ Period
4. What were the names of the two smaller supercontinents created by the break up?  
\_\_\_\_\_ and \_\_\_\_\_
5. How fast are the plates moving? \_\_\_\_ to \_\_\_\_ cm per year

**Think About It!**

Take a few moments to reflect on your journey through the world of plate tectonics!

Did you find any conflicting pieces of information? If yes, describe the conflicts?

What topic(s) would you like to explore further?

**Have time for a quiz?  
Try the Plate Tectonics Quiz listed on the Earth Science page!**