

# [Plate tectonics](https://assignbuster.com/plate-tectonics/)

[](https://assignbuster.com/)[Science](https://assignbuster.com/essay-subjects/science/), [Physics](https://assignbuster.com/essay-subjects/science/physics/)

Earth and Space Sciences Science is predictable: Continental drift suggested continents had moved in the past   
Plate Tectonics- It has been established that the earth’s crustal plates are in a constant horizontal motion (Young, Greg p. 14). This motion is attributable to the continental drift. It is now homogeneously agreed that the earth’s lithosphere is in constant movement. The numerous studies of the earth’s layers indicate that plate tectonic events (earthquakes) can be predicted.   
Science should be testable   
Plate tectonics- The earth is layered. These layers interact differently. Plate tectonics has shaped the land of the earth. This can be tested by various experiments carried out by geologists. For example, by pouring cooking oil into a glass beaker halfway with water, it will be observed that the oil will be in motion. This motion is attributable to the interaction of the earth’s layers. The science of plate tectonics is testable.   
Science appeals to natural causes.   
Plate tectonics- The theory of continental drift explains that the earth’s surface appeared different 300 million years ago (Young, Greg p. 26). The science behind plate tectonics indicates that the continents lie on multiple plates of the lithosphere, which are in a constant horizontal motion (like blocks of ice over the lake). Plate tectonics is attributable to the steady movement of the lithosphere. The blocks of lithosphere interact differently against each other. This brings about plate tectonic events that are experienced over the earth’s surface. The horizontal movement of the blocks of lithosphere is as a result of natural causes, which are not attributable to any human activities.   
Reference   
Young, Greg. Plate tectonics. Mankato, Minn.: Compass Point Books, 2009. Print.