

Dear President Bush:

In the past few weeks we've been studying about earthquakes and volcanoes. And we learned that there is pattern where earthquakes happen to occur. The earthquakes happen to occur in the southwestern part of the U.S.A., Japan, South American coast, and several other places around the world.

How are earthquakes caused? Well, deep tectonic plates sliding with in the earth's surface cause earthquakes. The tectonic plates can be anywhere from 50 to 250 miles thick. This tectonic theory explains the cause of earthquakes and volcanoes. Volcanoes can also occur between the oceanic and continental plates, which would be between two oceanic plates.

There are four types of plate boundaries: there are divergent, convergent, transform, and plate boundaries. The plates are made of rock and drift all over the globe; they move vertically and horizontally. There are three types of plate movements: divergent plate movement, convergent plate movement, and lateral slipping plate movement.

The oceanic crust is about 10 kilometers thick and is about 70 to 100 million years old. The continental crust is about 20-80 kilometers thick and is about 3 billion years old.

The 14 current oceanic plates are: The Eurasian plate, Australian Indian plate, and Philippine plate, Pacific plate, Juan de Fuca plate, Nazca plate, Cocos plate, North American plate, African plate, Arabian plate, the Antarctic plate, and the Scotia plate.

How can we help California and Mexico if they ever needed any help? We can help them by sending the following: food, clothing, medicine, doctors, tents, but more importantly, we offer them any type of help they need.

Sincerely,

Maggie and Rosy