

Take a Tectonic World Tour!

<http://www.amnh.org/ology/features/plates/loader.swf>



Start your tour where the Theory of Plate Tectonics began—at the mid-Atlantic Ridge.

Click on STORY, ANIMATION and STATS at each stop of the tour.

1. What type of plate action formed the **Mid-Atlantic Ridge**? _____ In your own words, describe how the ridge formed. _____

What 2 plates separate to form Iceland? _____

2. **Next stop, South America:** Where and when was the largest earthquake ever recorded? _____ It was caused by plate action at _____ boundary. It caused two other catastrophic events to occur. Name them: _____

3. **Next stop, San Francisco, California.** What type of plate boundary causes all the earthquakes here? _____ It is called the _____ Describe the plate action: _____

When was the famous San Francisco Earthquake? _____

4. **Moving north, Mount St. Helens .** What was the first warning signal that the volcano was about to erupt? _____ What did it cause before the eruption? _____

Mt St Helens is part of the _____ Mountain Range. These mountains have _____ active volcanoes and are part of _____

5. **Moving north again,** the state of _____ had an earthquake in _____ which was recorded as _____ on the Richter scale. A few hours, a huge _____ reached Hawaii and _____. The earthquake was caused by _____

6. **Onward to Japan.** What tectonic action formed Mt. Fuji? _____ When was it formed? _____ When was the last time it erupted? _____

Japan has _____ active volcanoes because it lies on the _____

7. **To Indonesia.** What volcano erupted so violently that it was heard across the Indian Ocean?

_____ What did the eruption cause? _____

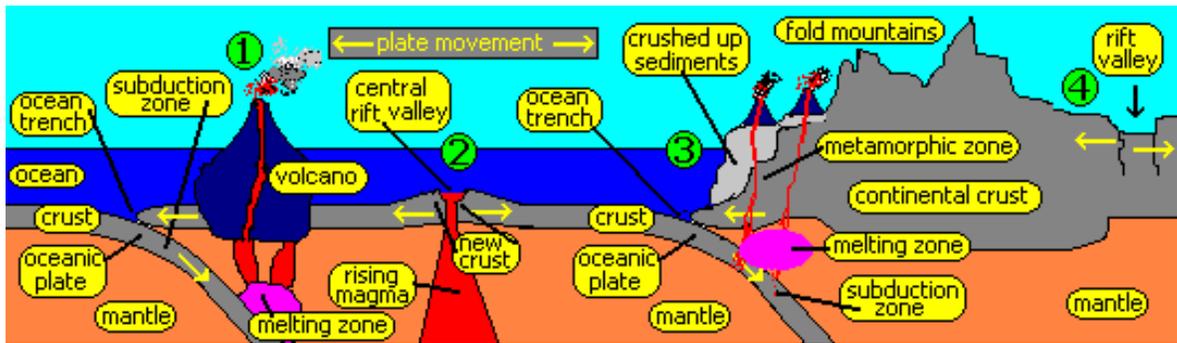
How did the smoke and ash affect the atmosphere? _____

8. **Let's climb Mt. Everest!** The tallest mountain is part of the _____ mountain range and was formed by _____. The _____ plate crashed into the _____.

9. **Next, an African safari!** _____ is the tallest mountain in Africa. In your own words, describe the tectonic action that formed it: _____

What kind of plate boundary is the East African Rift? _____

When did Kilimanjaro last erupt? _____ When continental plates diverge (separate) on land, it is called a _____.



10. **Moving north to the Middle East.** The San Andreas Fault is not the only transform (strike-slip) boundary in the world. There is another one in _____ called the _____. A huge earthquake in 1999 shifted the ground as much as _____.

11. **West to the Mediterranean Sea.** Mount _____ in Italy has been erupting for _____ years. It was formed by _____ and has erupted over _____ times. It was formed _____ years ago.

12. **To the middle of the Pacific plate, far from a plate boundary—Hawaii!** This island chain was formed over a _____. In your own words, describe how a hot spot formed Hawaii _____

What island is over the hot spot now? _____. What is the name of the new island That is forming? _____. When will it appear above the sea? _____