

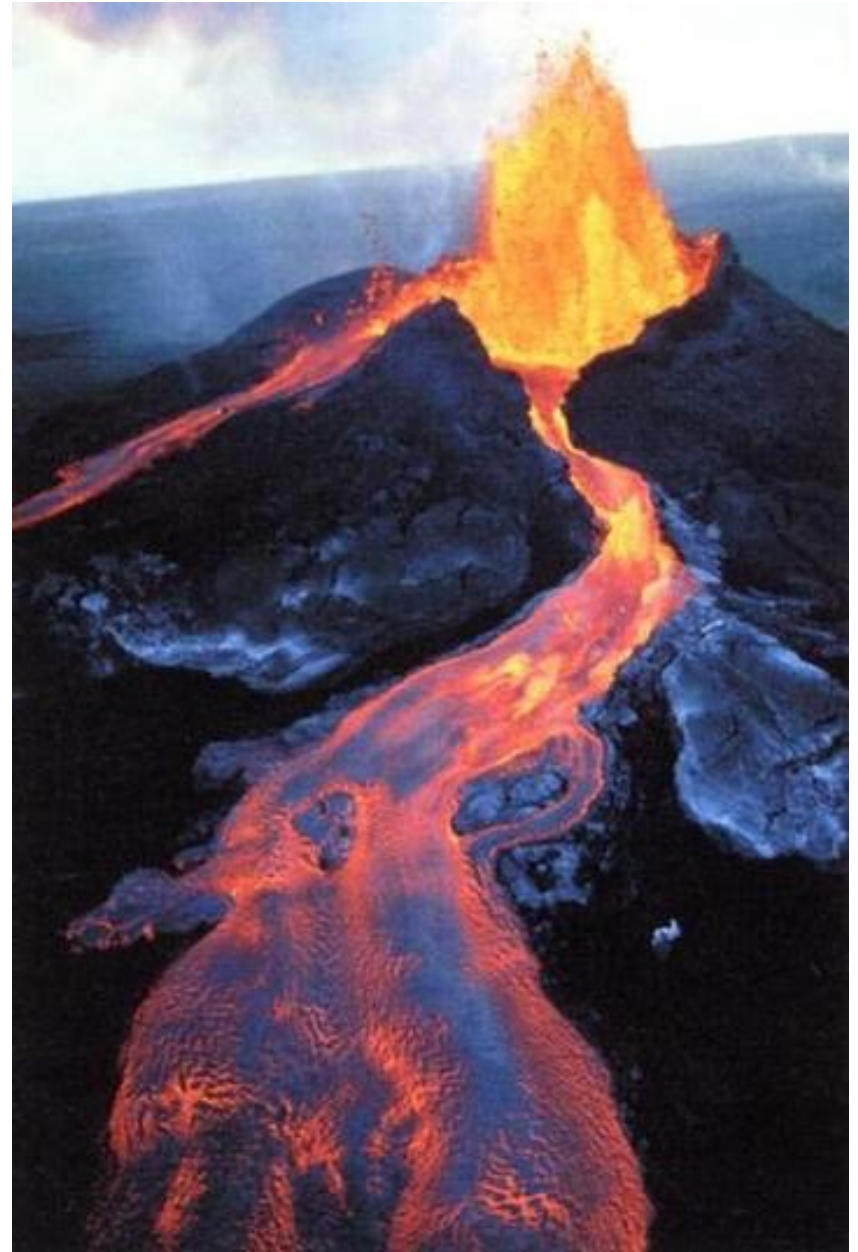
# Volcanoes

- State that volcanoes occur at tectonic plate boundaries.
- Explain why do people live near volcanoes?
- Contrast volcanoes predictability with those of earthquakes.

cwk

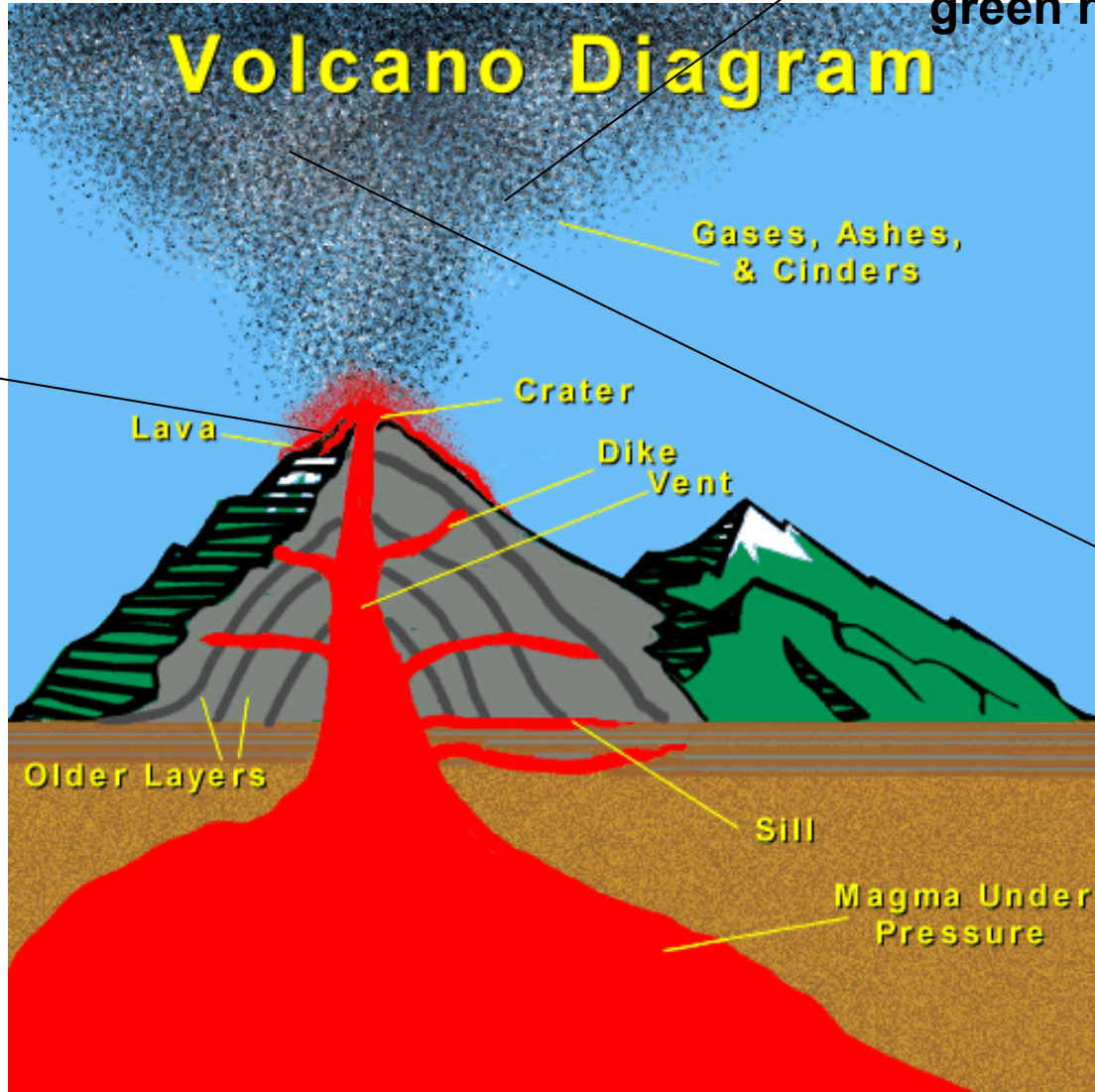
# Volcanoes

date





# Volcano Diagram

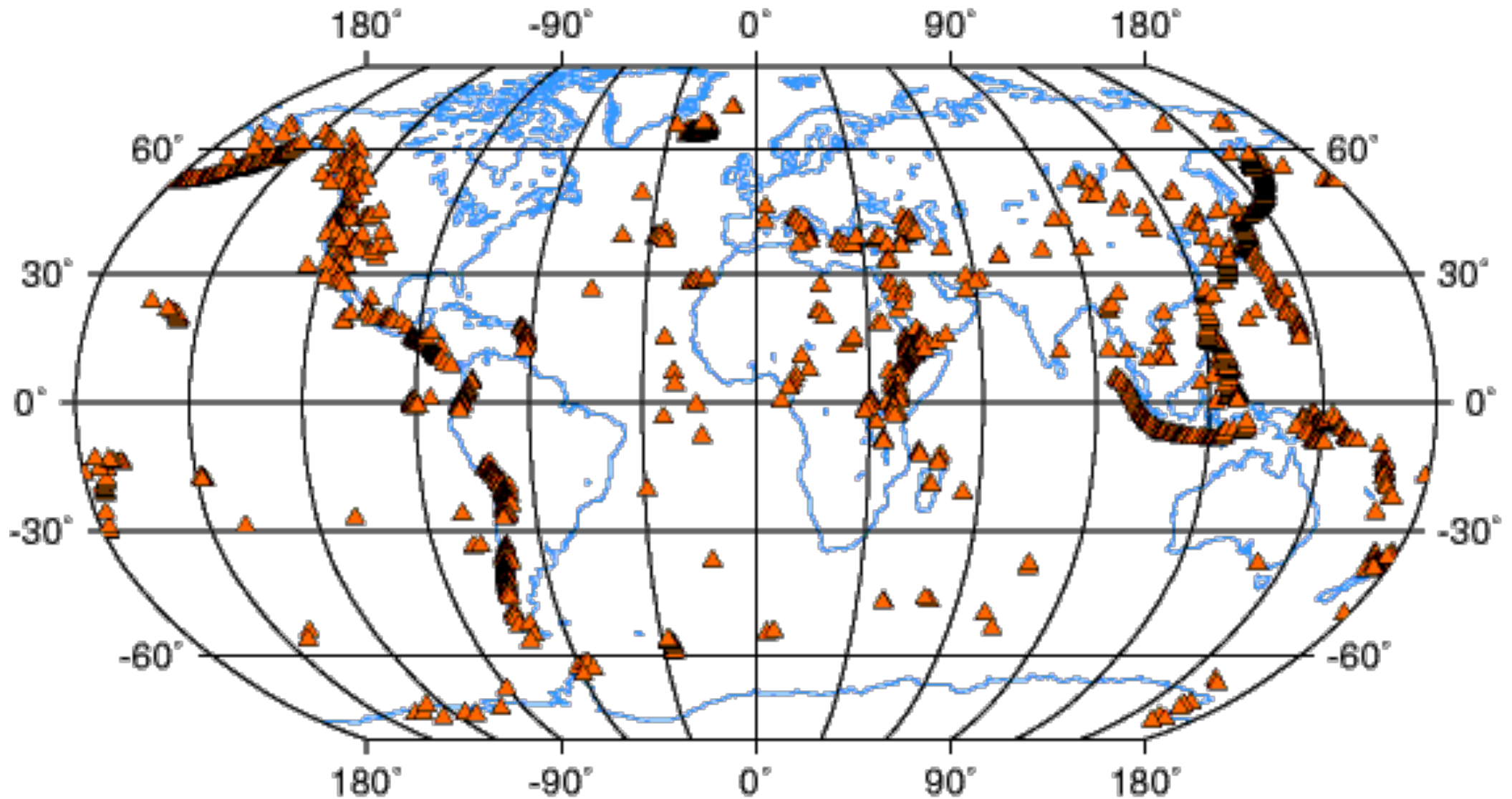


**Gas emitted: Carbon dioxide, carbon dioxide contributes to the green house effect**

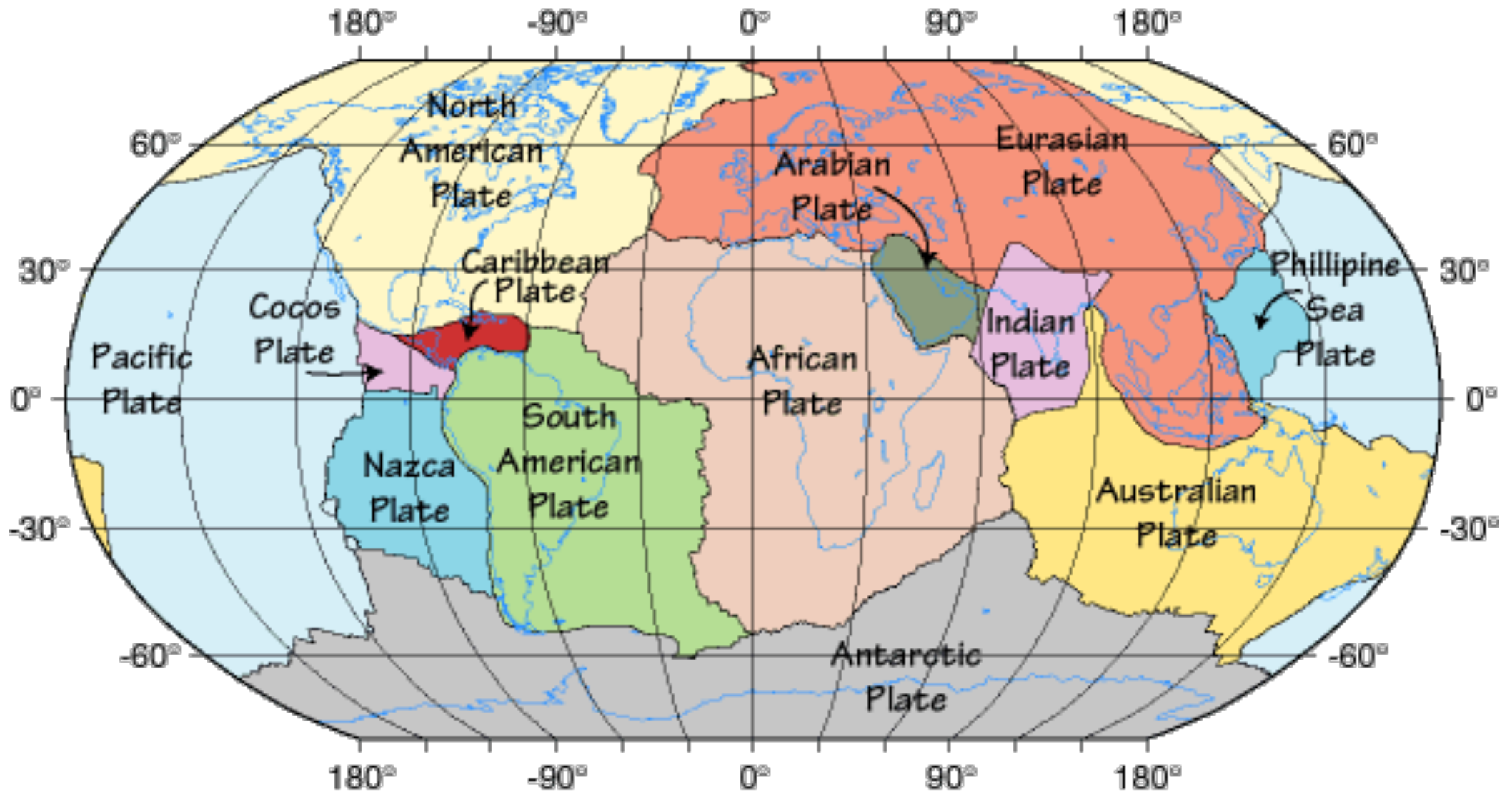
**Lava flows:  
Can create new land, dramatic scenery.  
Can also destroy any living thing in its path**

**Dust:  
Contributes to the haze effect**

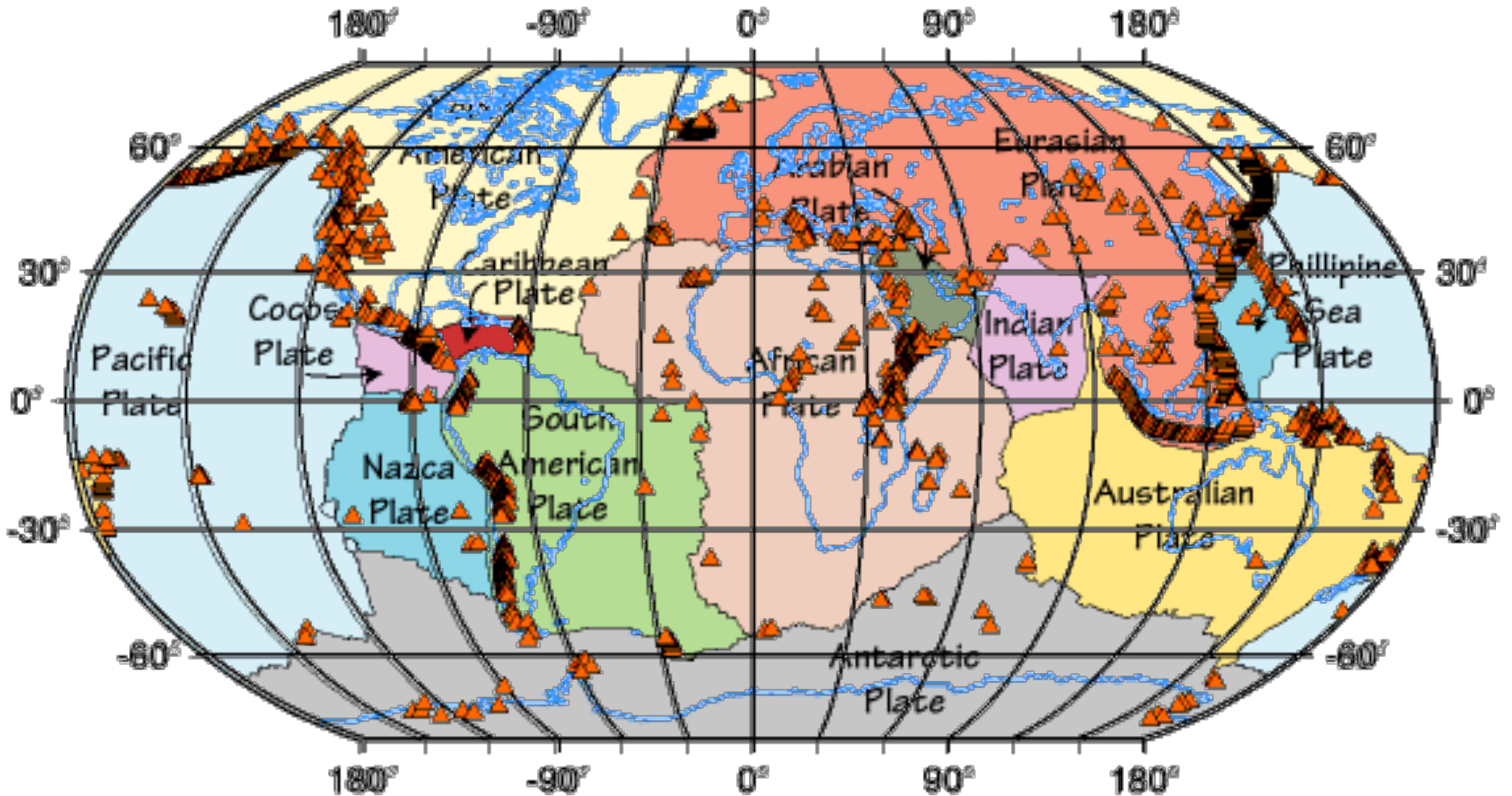
Do they occur everywhere?



Do they occur everywhere?



They occur on tectonic plate boundaries



# Predicting Volcanic Eruptions

There are some clues that say a volcanic eruption might happen soon. Before an eruption, molten rock rises up into chambers near the surface, causing the ground surface to bulge slightly.

This causes mini-earthquakes near the volcano. But sometimes molten rock cools down instead of erupting, so mini-earthquakes can be a false alarm





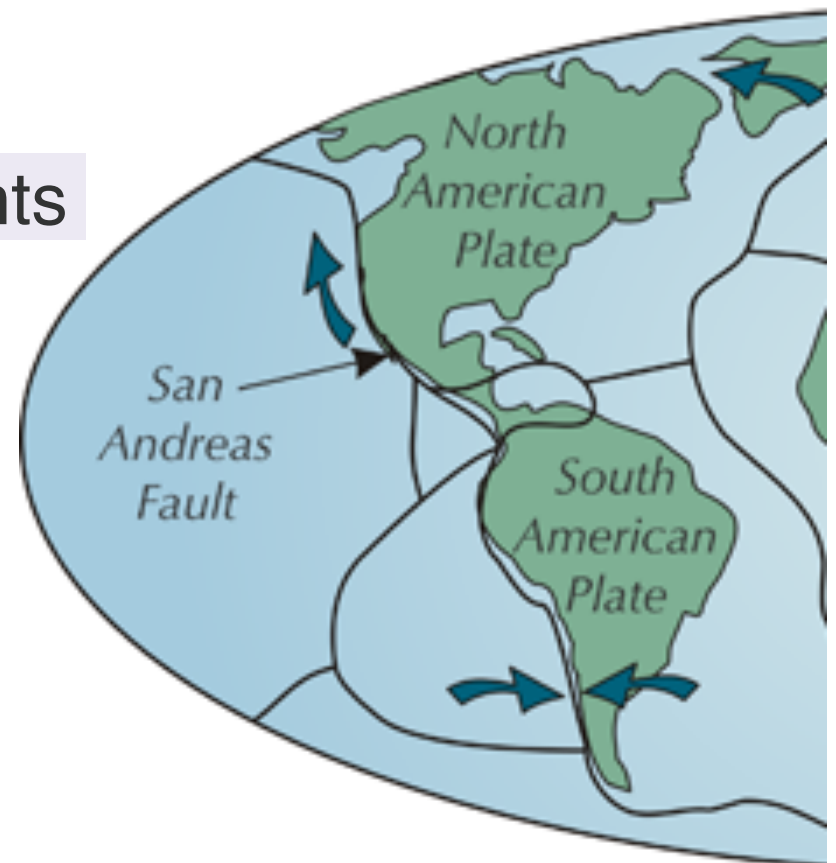
# Practice Questions

1 Catania is a city in Italy that is located near to an active volcano. In the last few days there have been some mini-earthquakes in the city and some of the residents are starting to evacuate.

a Why are some of the residents evacuating?

b Suggest why not all of the residents are evacuating.

2 Palmdale is a city in the USA. It lies on the San Andreas Fault. Lots of earthquakes happen in Palmdale. Explain why.



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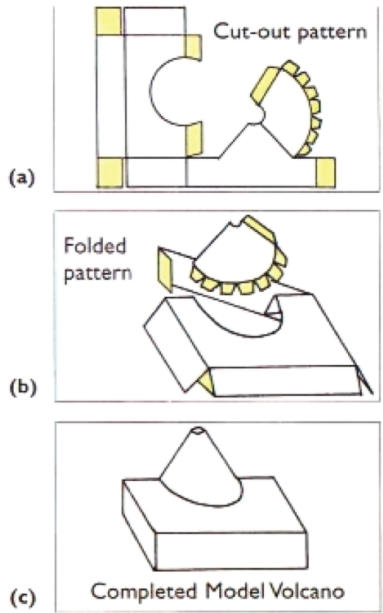
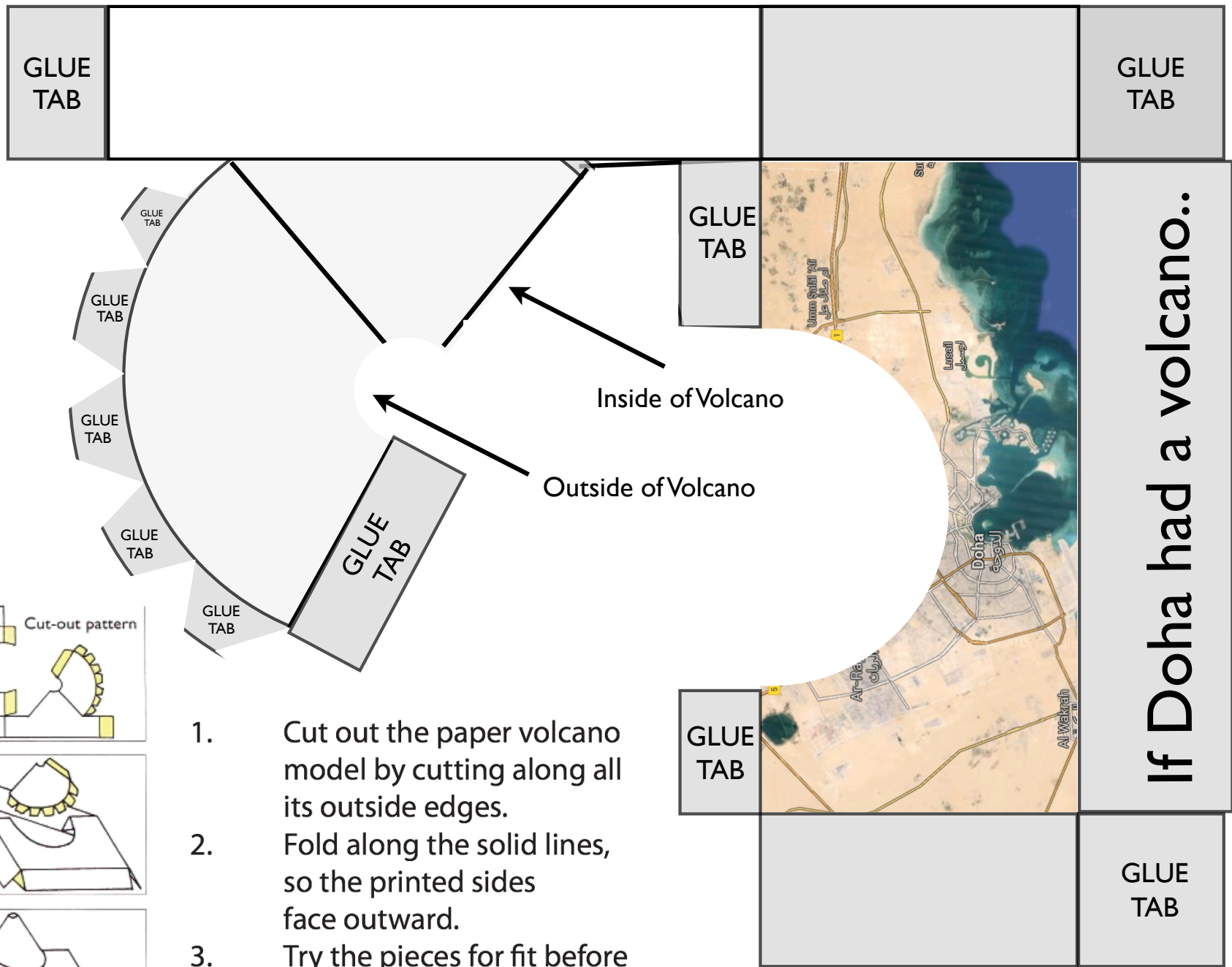
# Volcanoes

date

Homework: IN PAIRS

Make a model of a volcano in Doha & a poster explaining the differences between volcanoes and earthquakes.

Draw your diagram here ↓



1. Cut out the paper volcano model by cutting along all its outside edges.
2. Fold along the solid lines, so the printed sides face outward.
3. Try the pieces for fit before applying glue or tape.
4. Glue the tabs as indicated.

If Doha had a volcano..

cwk

# Volcanoes

date

Homework Examples

By: Hana and Haya ♡

# EarthQuakes ✓ VS. VOLCANOES

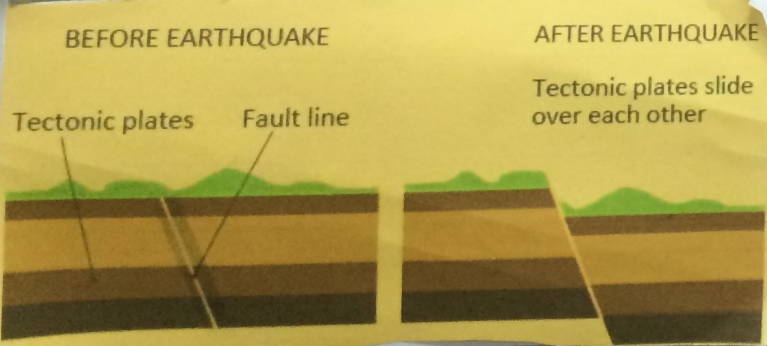
### What is an earthquake?

An earthquake is when two blocks of the earth suddenly slip past one another. The surface where they slip is called fault or fault plane. Sometimes an earthquake has fore-shocks. These are smaller earthquakes that happen in the same place as the larger earthquakes that follows.

How are earthquakes recorded?  
Earthquakes are recorded by instruments called seismograph. The recording they make is called a seismogram when an earthquake causes the ground to shake, the base of the seismograph shakes too.

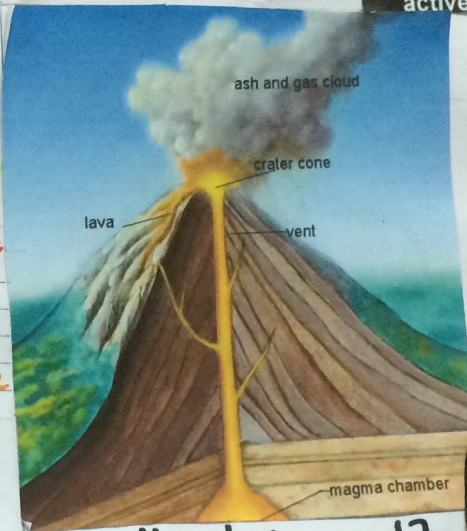
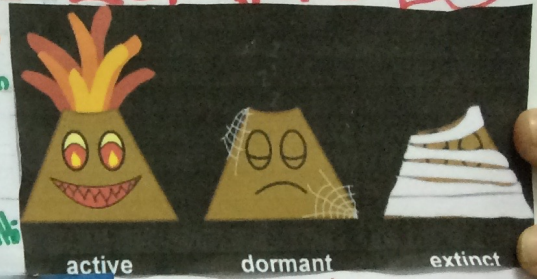
### What causes earthquakes?

Earthquakes are usually caused when rock underground suddenly breaks along a fault. This sudden release of energy causes the seismic waves that make the ground shake. When two blocks of rock or two plates are rubbing against each other, they stick a little.



### What is a volcano?

A volcano is a mountain that opens downward to a pool of molten rock below the surface of the earth.

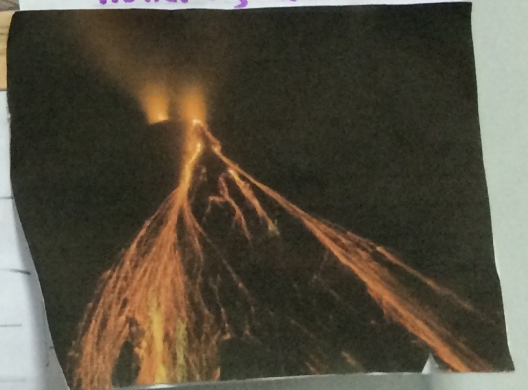


### Why do volcanoes occur?

Earth's volcanoes occur because its crust is broken into 17 major, rigid tectonic plates that float on a hotter layer in its mantle.

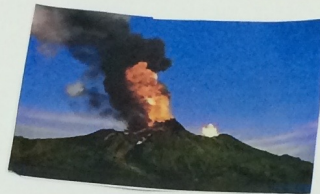
### How do they erupt?

Erupting volcanoes can pose many hazards, not only in the immediate vicinity of the eruption.

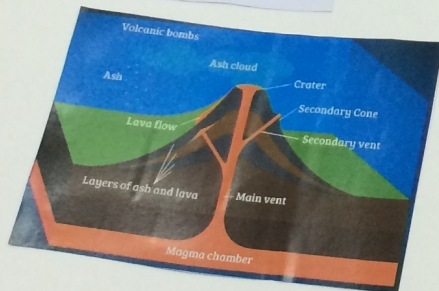


Salma  
Lina S

# Volcanoes & Earthquakes



A volcano is a mountain that opens downward to a pool of molten rock below the surface of the earth. When pressure builds up, eruptions occur. Gases and rock shoot up through the opening and spill over or fill the air with lava fragments.



At first it may seem odd that people would want to live close to a volcano. After all, volcanoes have a nasty habit of exploding, discharging liquid rock, ash, poisonous gasses, red hot clouds of embers, and generally doing things that kill people. Yet, throughout history, people have deliberately chosen to risk all those hazards and live near them, even on the slopes of active volcanoes that have erupted within living memory.

People live close to volcanoes because Geothermal energy can be harnessed by using the steam from underground which has been heated by the Earth's magma. This steam is used to drive turbines in geothermal power stations to produce electricity for domestic and industrial use.

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One reason people live near earthquakes is because many of the Earth's natural resources of energy, minerals, and soil are concentrated near past or present plate boundaries. The utilization of these readily available resources has sustained human civilizations, both in the past and in the present.





YARA KASSI  
9/2/20



YARA KASSI  
9/2/20







Hand-drawn  
Volcano  
3



Hand-drawn volcano model on a white tray with a red cap on top.







# Which words have you learned so far? SPLAT

**crust**

meteorologist

**continental  
drift**

**Wegener**

**convection  
currents**

**tremors**

**plate  
boundaries**

**solid**

**mantle**

**volcanoes**

**tectonic  
plates**

**earthquakes**

**core**

**liquid**

**sudden  
movement**

**tsunami**

natural  
**radioactive  
decay**

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