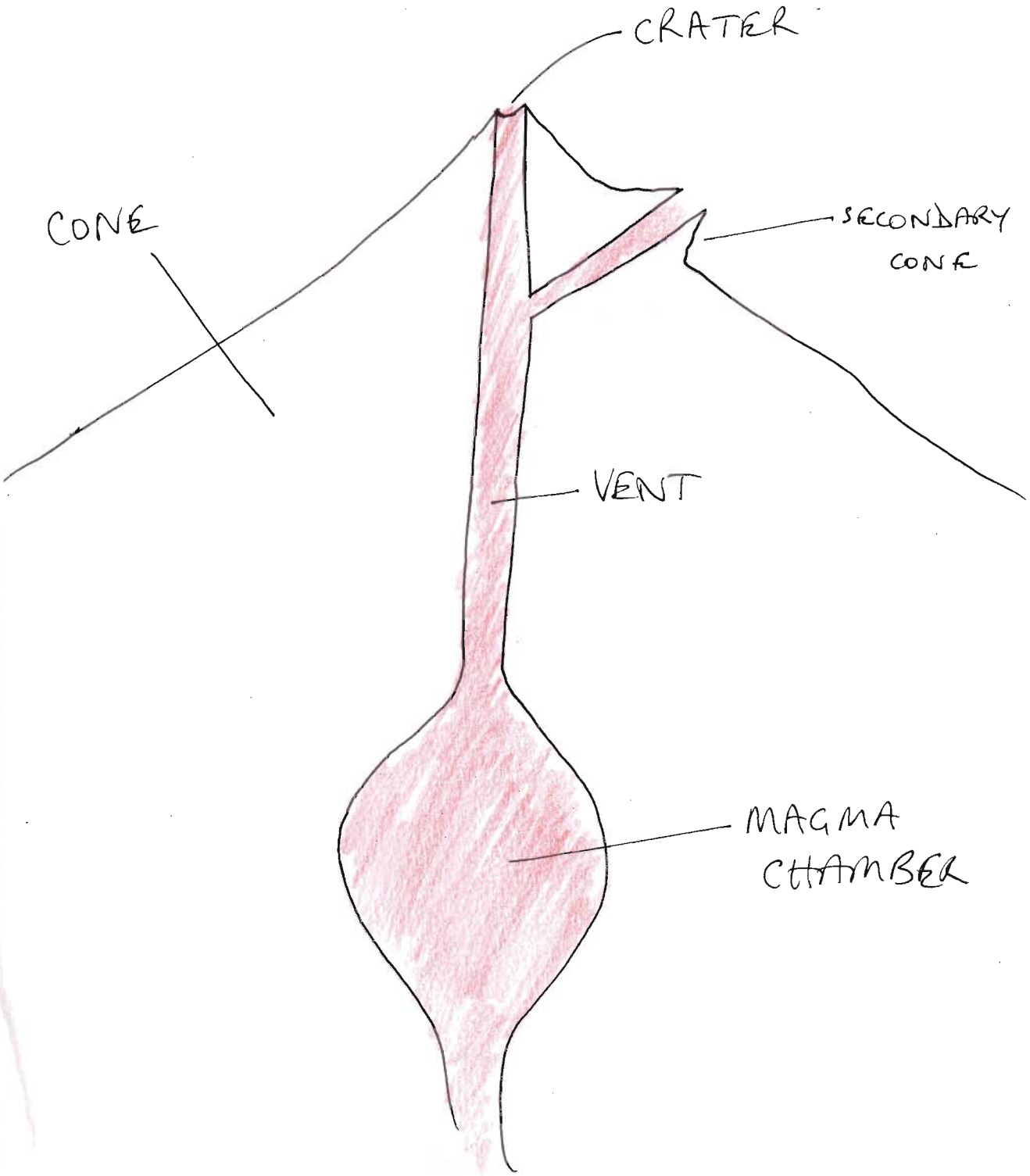
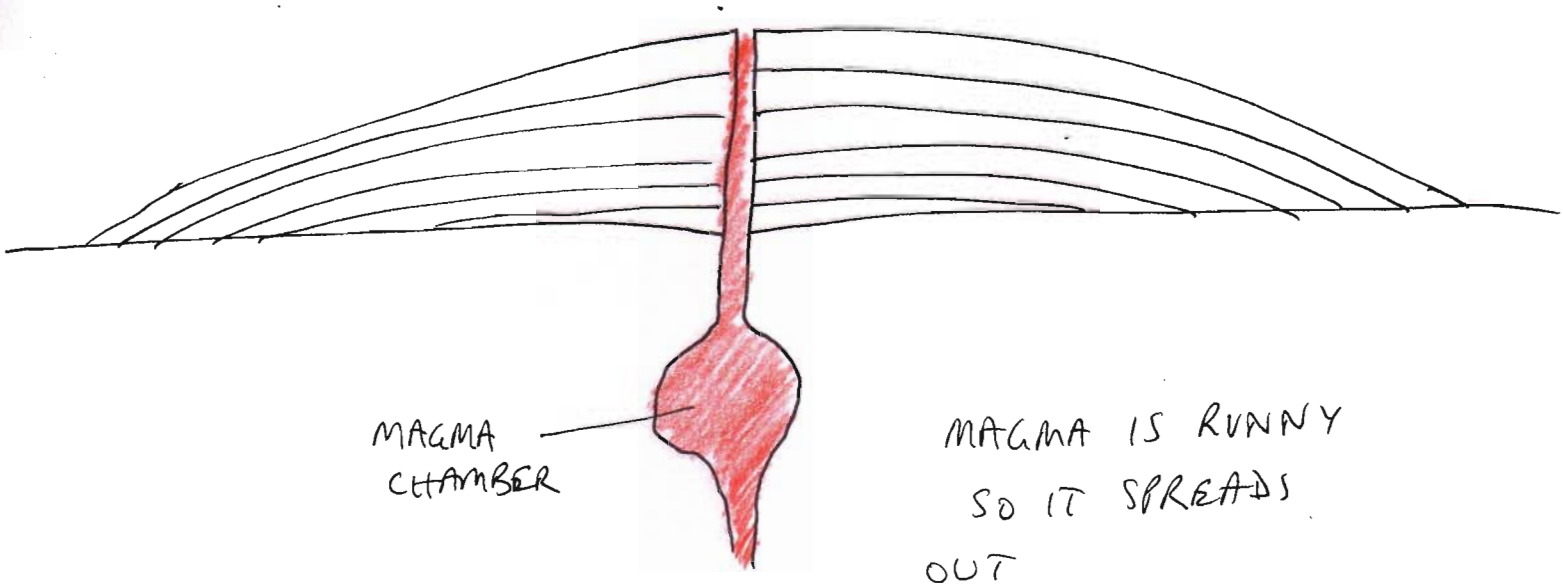
VOLCANO: PARTS

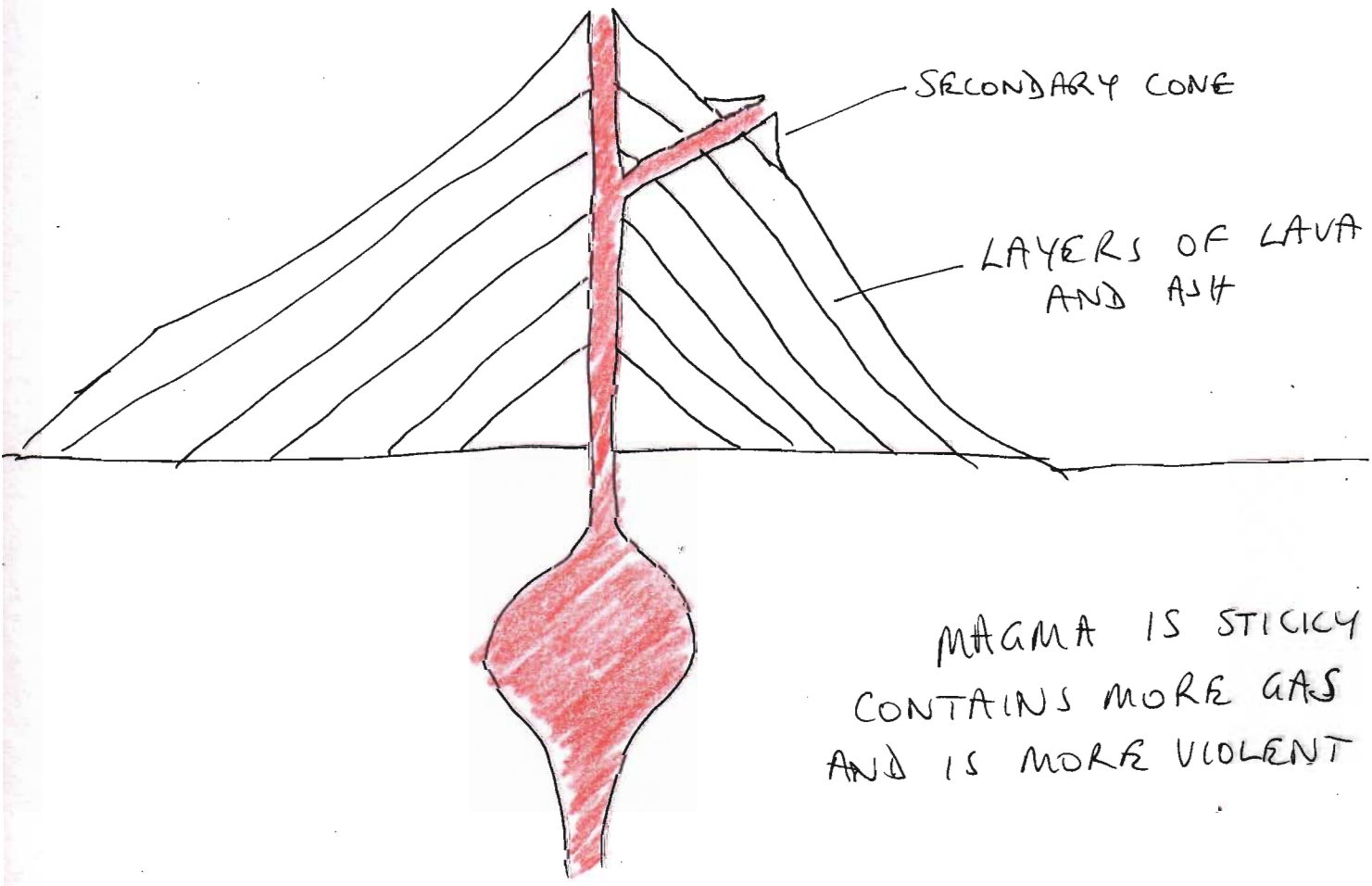


SHIELD VOLCANO



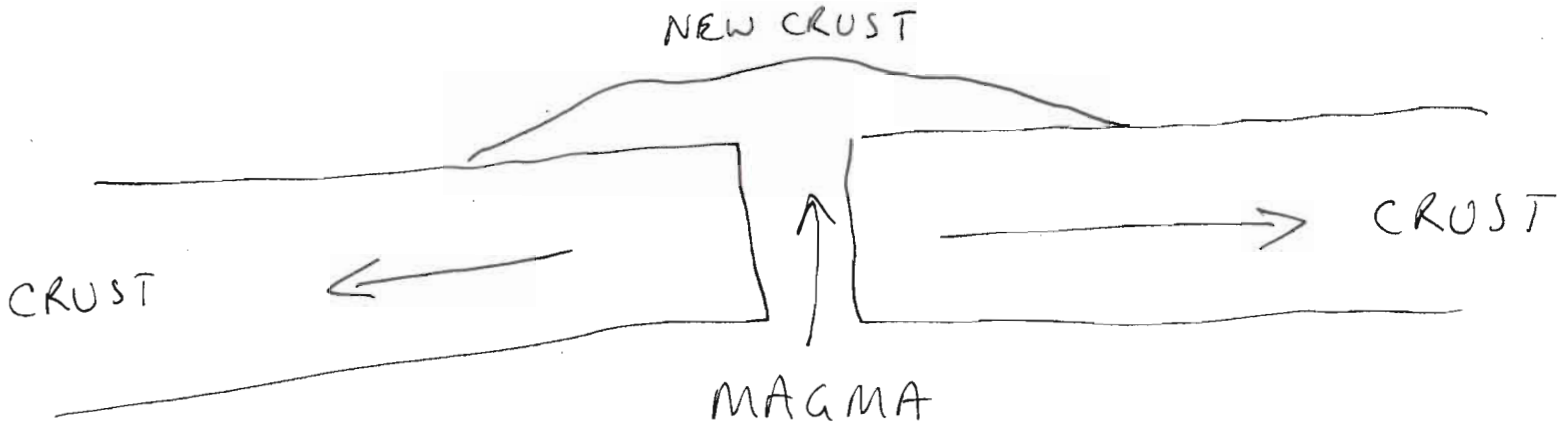
MAGMA IS RUNNY SO IT SPREADS OUT

COMPOSITE VOLCANO



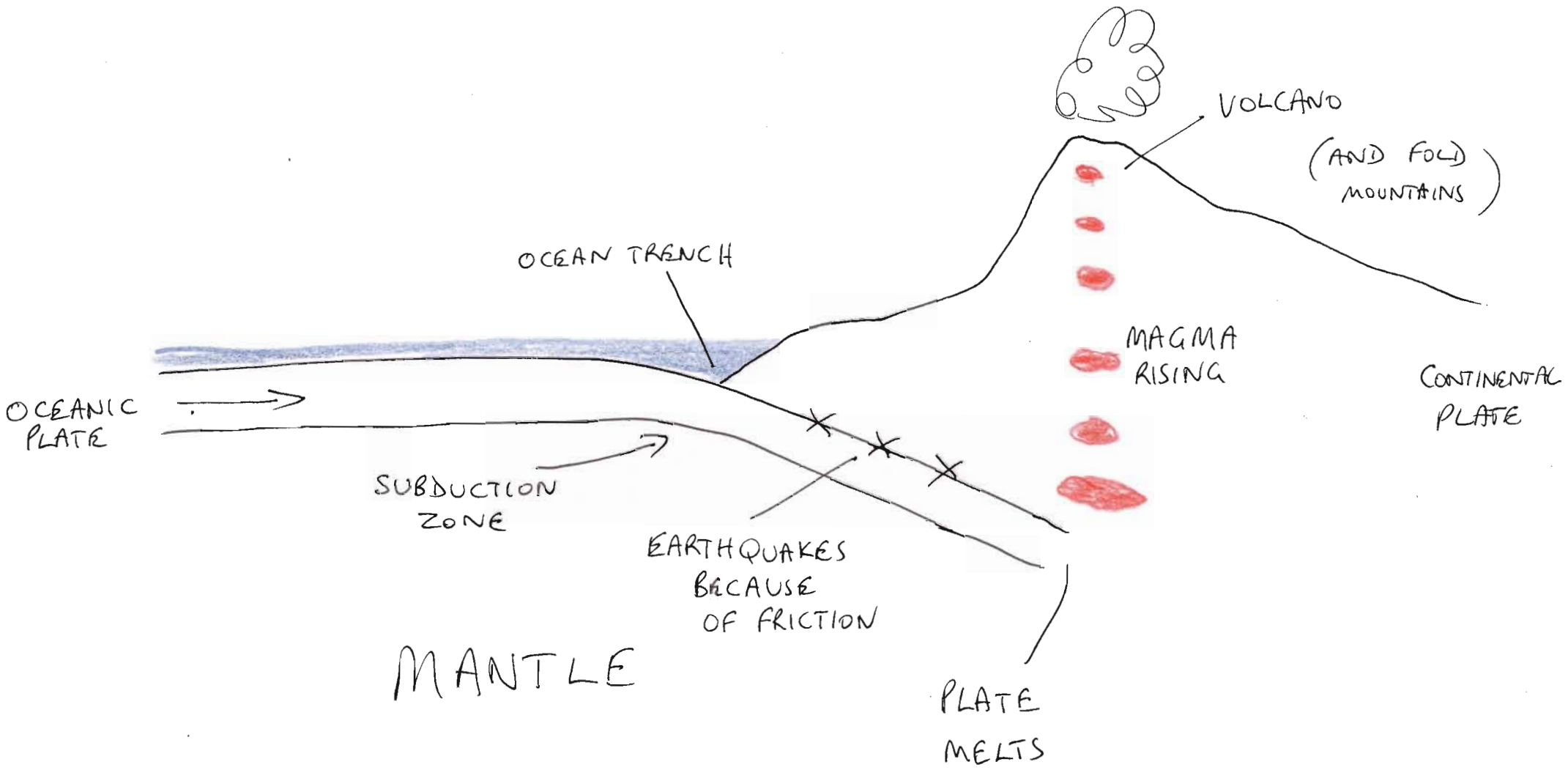
MAGMA IS STICKY, CONTAINS MORE GAS AND IS MORE VIOLENT

CONSTRUCTIVE PLATE BOUNDARY



MANTLE

DESTRUCTIVE PLATE MARGIN

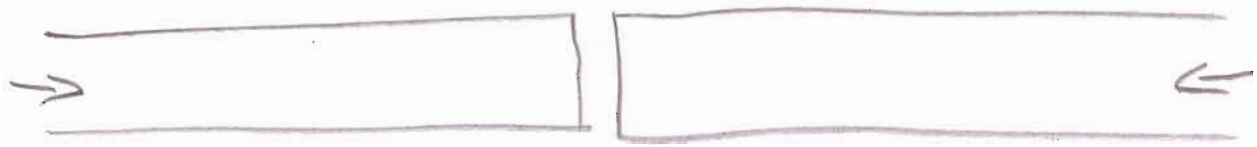


OCEANIC PLATE SINKS UNDER CONTINENTAL PLATE BECAUSE IT IS MORE DENSE.

COLLISION BOUNDARY

(1)

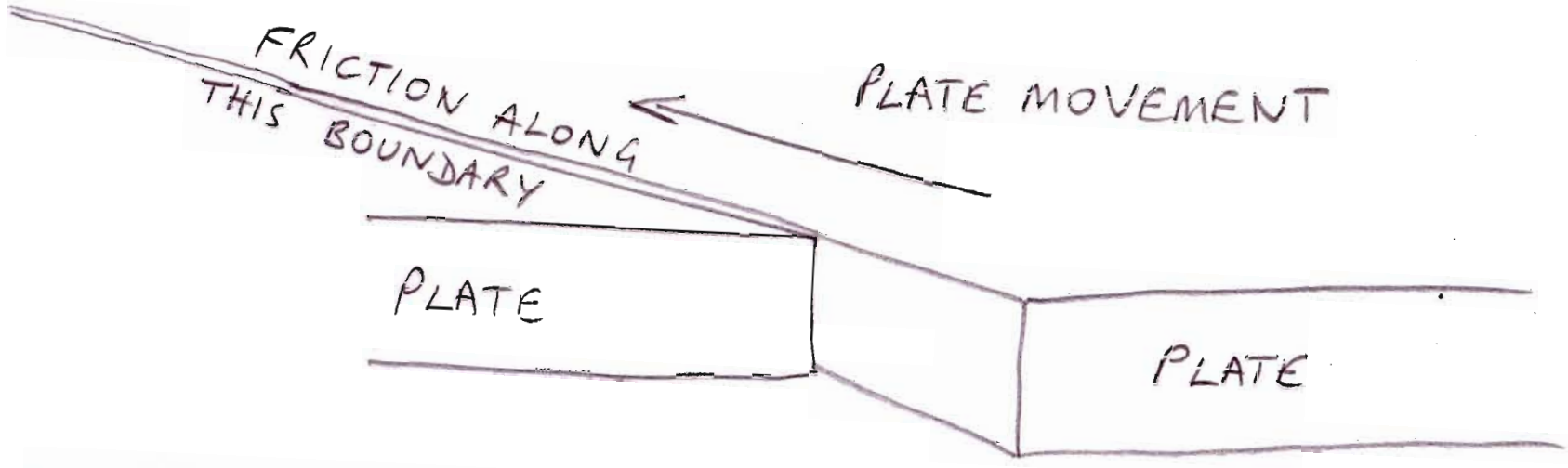
PLATES MOVING TOWARDS EACH OTHER.



(2)

EXAMPLE: ALPS

CONSERVATIVE PLATE BOUNDARY



1. FRICTION BUILDS UP AS THE PLATE MOVES ALONGSIDE THE OTHER.
2. THE PRESSURE IS SUDDENLY RELEASED SHAKING THE GROUND AS EARTHQUAKES.

Why do people live near volcanoes?

The ash from the volcanoes produces soil which is good for **farming**.

They do not have the **money** to move.

They do not want to leave the land that their family has owned for generations.

They believe it will not happen to them.

There may be geothermal energy (heat from under the ground).

For all the time that the volcano is not erupting, it is a nice place to live.

Name: **Date:**

Why do some volcanoes kill more than others?

- The type of volcano

Some volcanoes are **Composite** cones which can have **violent** eruptions which are very dangerous and some are **shield** volcanoes, which just produce a lot of runny lava.

- How many people live in the area

Vesuvius has 2 million people living nearby. Mount Erebus is in the **Antarctic** . Nobody lives there.

- How powerful the eruption was

Krakatoa in 1883 was a very powerful eruption which killed 36,000 people. Other volcanoes may just produce steam and smoke.

- The type of eruption

Mt. Pelee produced a **pyroclastic** flow which killed 20,000 people. Kilauea on **Hawaii** just produces runny lava.

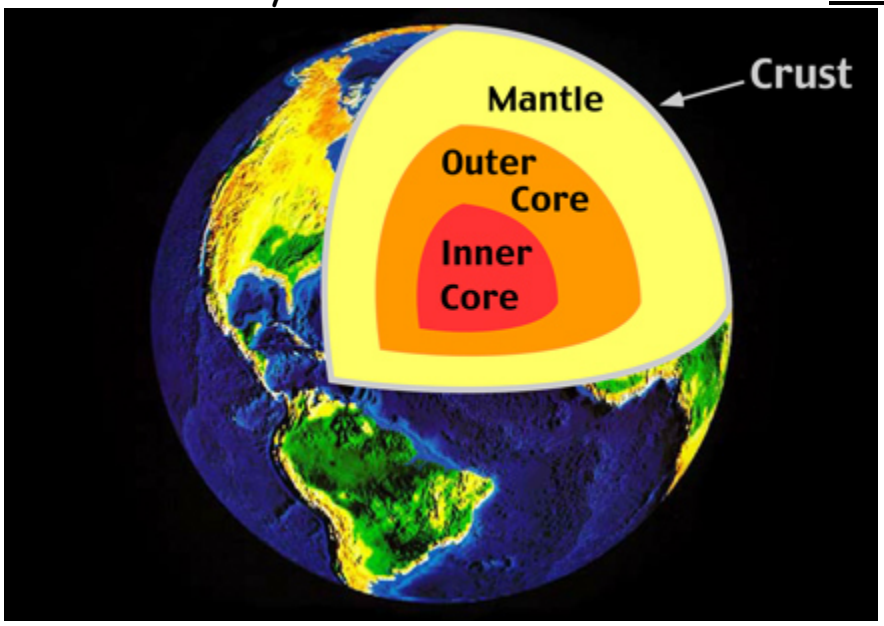
- Whether it was predicted

Scientists knew Mt. **St. Helens** was going to erupt so they were able to move people away. Other volcanoes erupt with no **warning** .

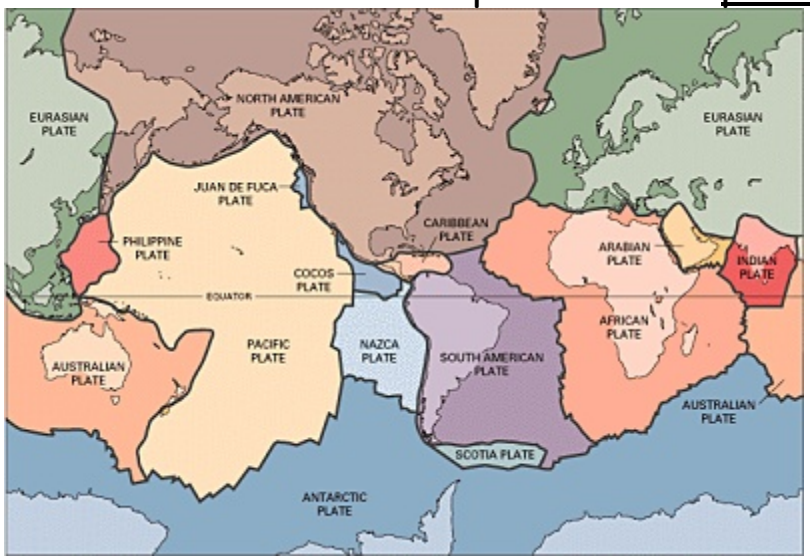
Where do most earthquakes and volcanoes happen?

What are crustal plates?

The outside layer of the Earth is called the crust.



The crust is divided into pieces called plates.



These are moved by convection currents in the mantle.

The continents and oceans ride on top of the plates.

What are plate boundaries?

These are the places where the crustal plates join.

Are these the same as plate margins?
Yes.

Why do earthquakes and volcanoes happen at plate boundaries?
In some places the plates are coming apart. Magma comes to the surface through volcanoes. Example: **Iceland**. (Look at diagram about constructive plate margins.)
In some places the plates are moving towards each other causing earthquakes and volcanoes. Example: **Japan**. (Look at the diagram of destructive plate margins.)
In some places the plates are moving alongside each other causing earthquakes. Example: **San Andreas fault in California**. (Look at the diagram of the conservative plate margin.)