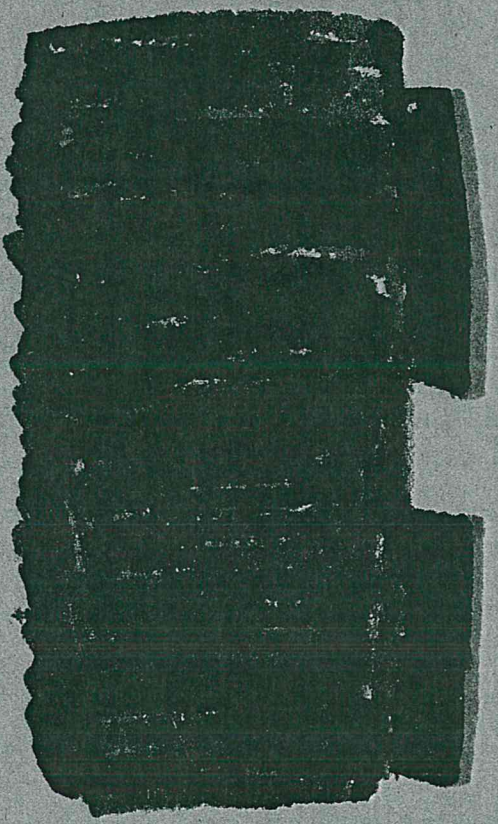
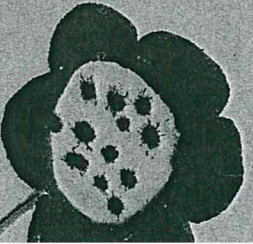


- Understand the role of convection currents beneath the Earth's surface



- Heat from the core travels up through the lava & makes convection. Then, it proceeds to move the plates

Abx + David 1)

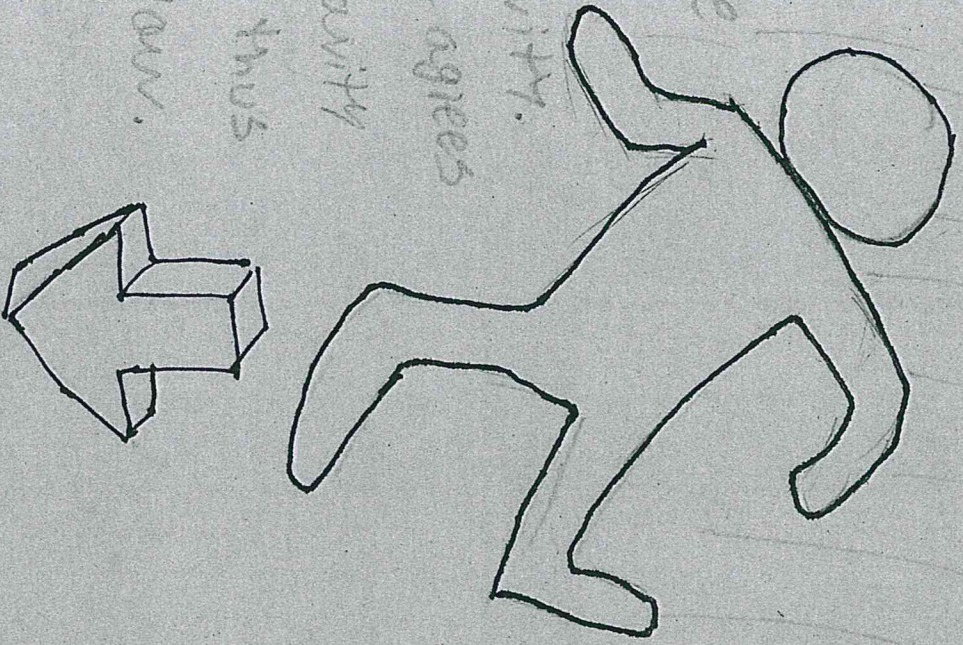


Q#4

Be able to describe the defining characteristics of theories vs. laws!

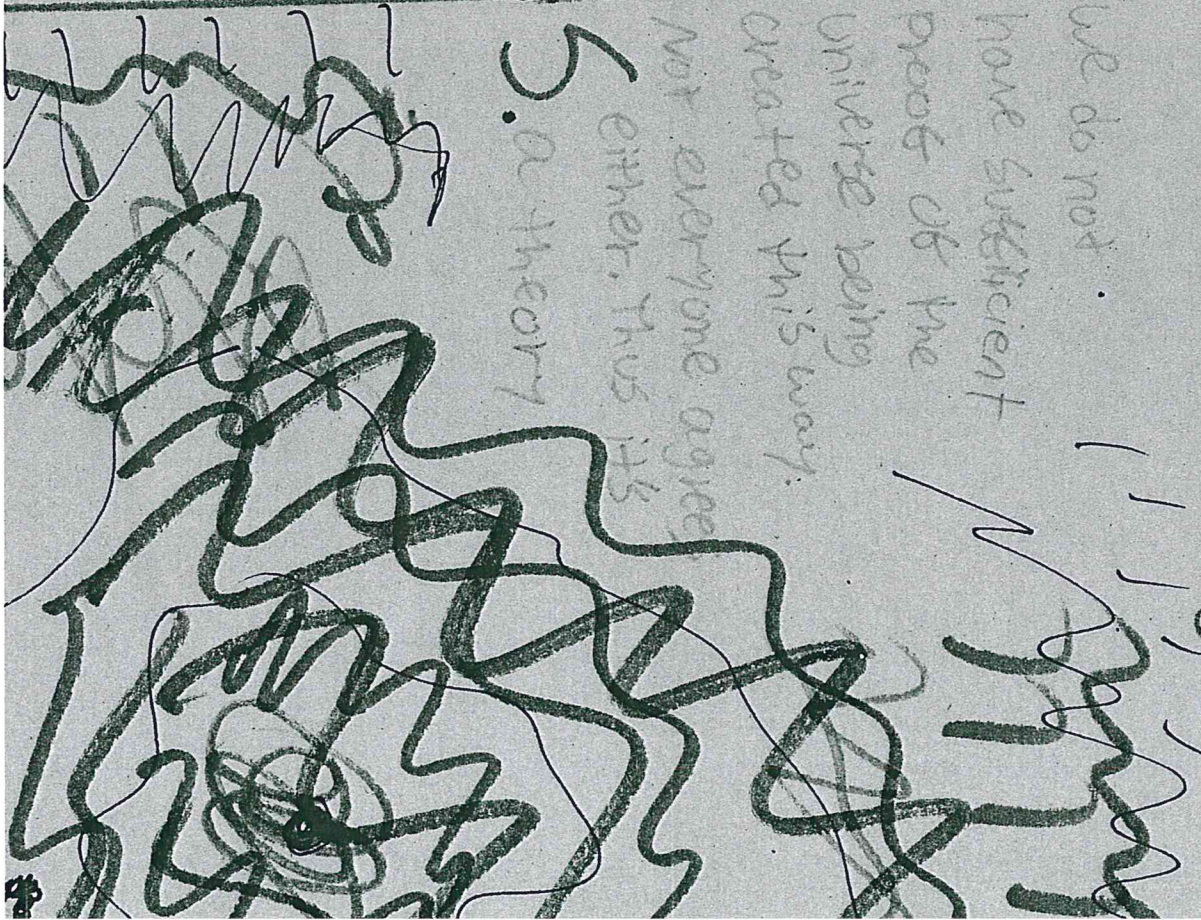
Law of Gravity

We have definitive proof of gravity. Everyone agrees that gravity exists, thus it's a law.



Theory (Big Bang)

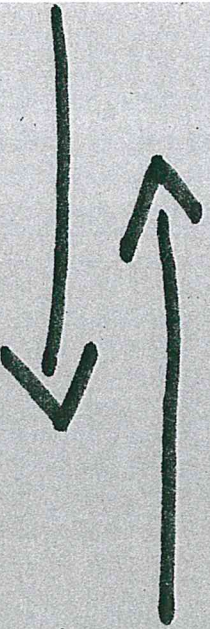
We do not have sufficient proof of the universe being created this way. Not everyone agrees either. Thus it's a theory.



massive amount of evidence

TRANSFORM PLATE BOUNDARIES

Example: Forms earthquakes



Forms where two plates slide past each other.

P.G: 145

Divergent Plate Boundaries

Example: Forms rift valleys



Forms when two plates separate.

P.G: 145

CONVERGENT PLATE BOUNDARIES

Example: Forms mountains



Forms when two plates collide.

Subduction

Happens when convergent plate boundaries collide. The dense plate sinks below the more plate creating subduction.

By: Aiyanna Grasso & Jessica Rosado
Q#4

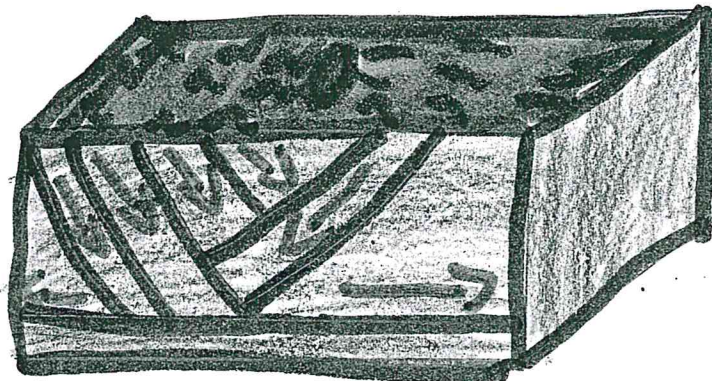
How do FAULT LINES form?

Fault - a crack or a fracture in Earth's lithosphere along which movement occurs.

Stress causes fractures in rocks which makes faults / FAULT LINES.

Transform Faults - fault that forms where tectonic plates slide horizontally past each other.

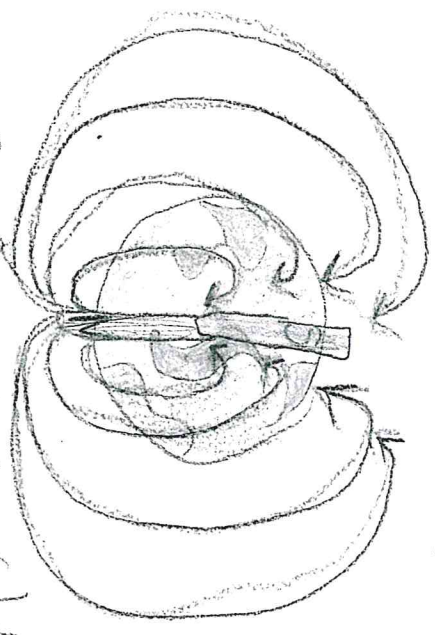
Fault zone - an area of many fractured pieces of crust along a large fault.



What creates the earth's magnetic field?

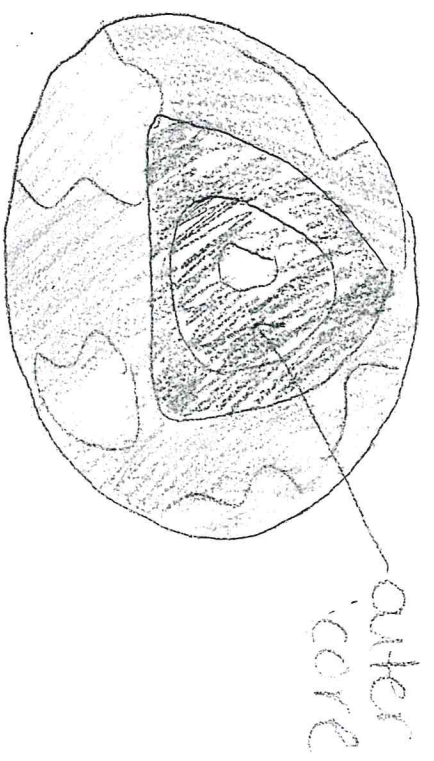
Q#5

The iron-rich, liquid outer ^{core} is like a giant magnet that creates the earth's magnetic field



In which layer of the earth is it found?

The liquid outer core is found below the mantle



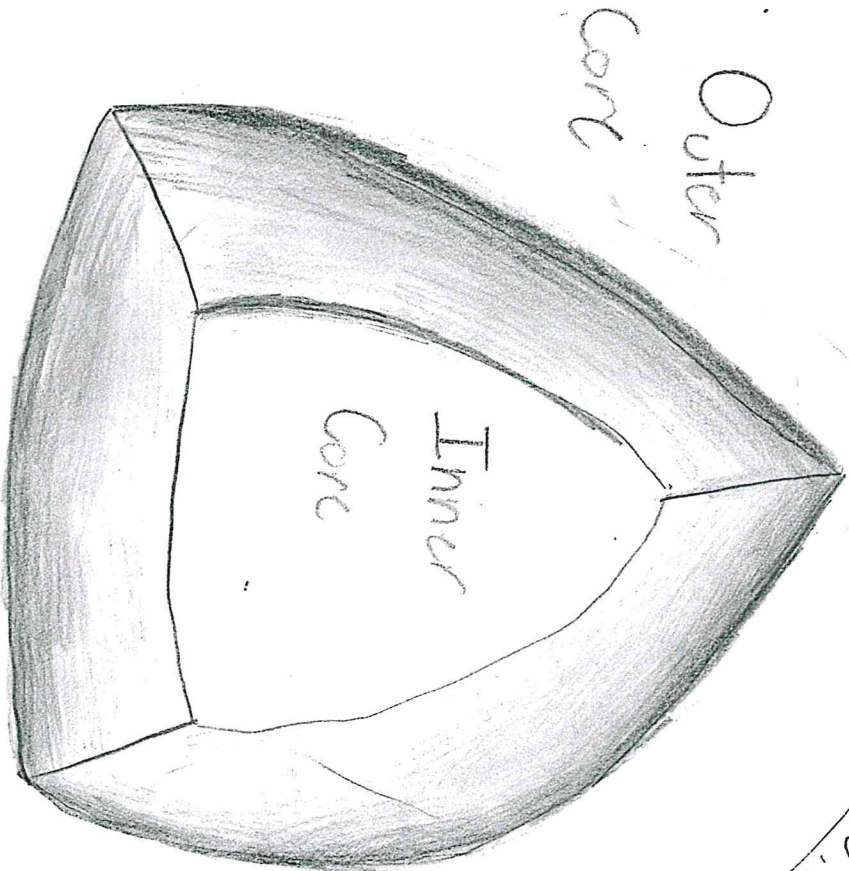
Inner core:

- * Solid
- * Iron
- * Density $= 13.09/cm^3$
- * Because the outer core is liquid, it is not rigidly attached to the inner core.

Q#6

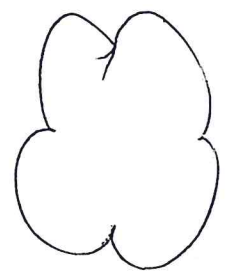
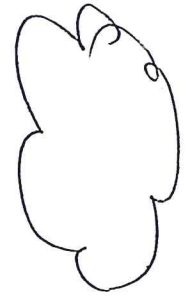
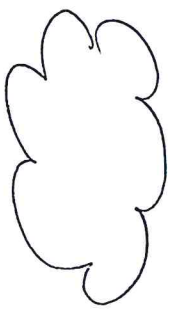
Outer Core:

- * Liquid
- * Iron
- * Density $11.9/cm^3$
- * The mantle and core are made of different materials and have different melting temperatures.



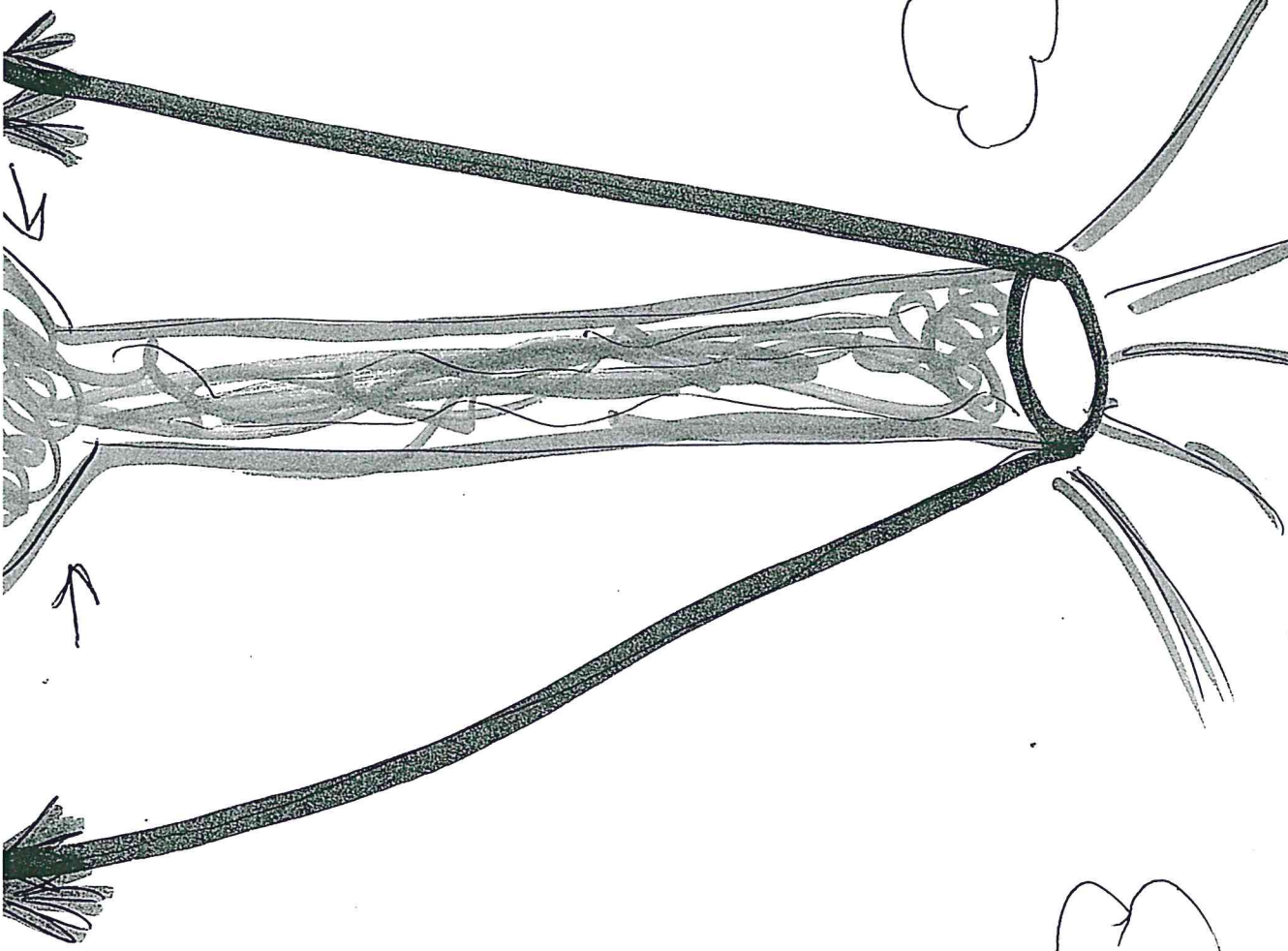
Q#1

What causes magma to erupt from a volcano?



magma

The main chemical compound in magma is silica. With different amounts of silica will change the thickness and viscosity of the magma. The viscosity changes how the volcano erupts.



Morgan & Yessenia
Tomplins & Mewinski

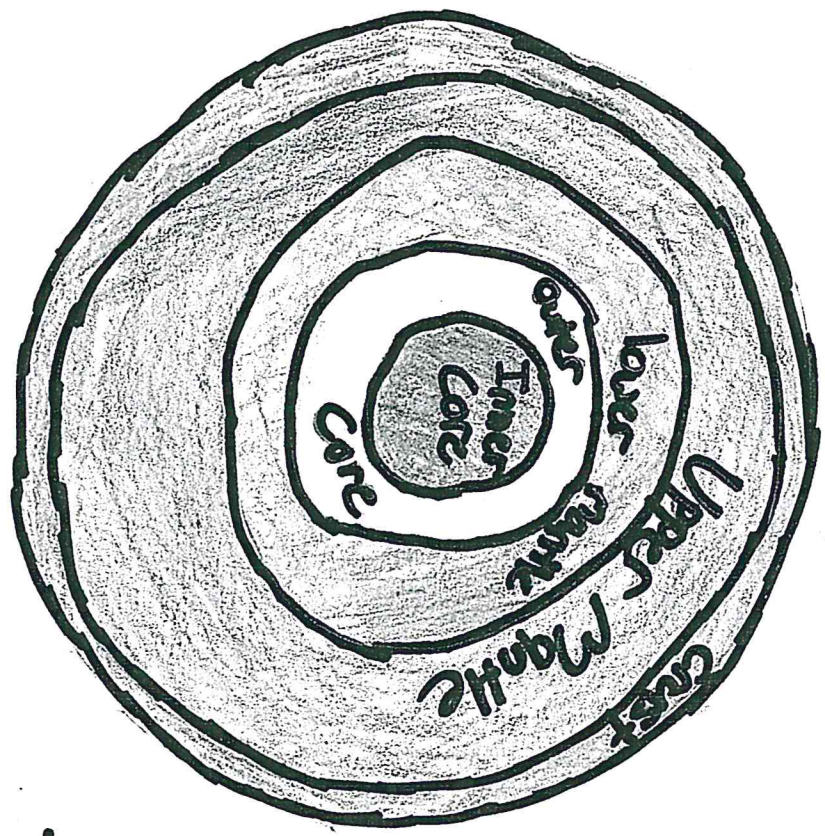
3 ways geologists study Earth's layers is...

○ Earthquake Waves ⇒ Earthquakes release energy in the form of waves. These waves come in 3 types. As these waves move through Earth they are affected by the different materials they travel through. Some waves cannot travel through certain materials. By studying how the waves move scientists are able to infer the density and composition of the materials.

○ Deep Mines ⇒ Deep mines allow scientists to look at the different rock layers as they go deeper into earth.

○ Sonar ⇒ Scientists send waves through Earth and as the waves travel through Earth they hit different rock layers and bounce back. Scientists count the time it takes the wave to get back.

Q.9



What 2 layers compose the earth's tectonic plate

The two layers that compose the earth's tectonic plates are the crust and upper mantle.

Crust

Upper mantle

Lower Mantle
 • Solid
 • Magnesium and iron silicates

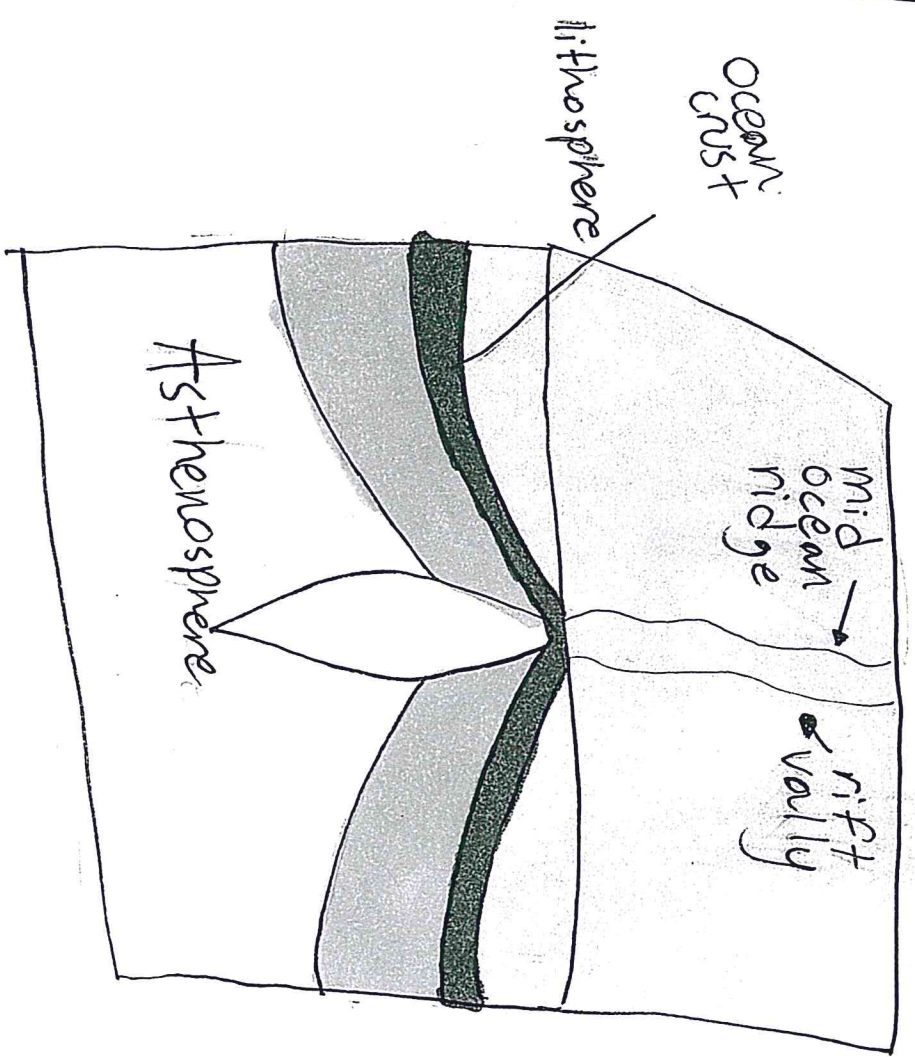
Outer core
 • Liquid
 • iron
 • Density =

Inner core
 • Solid
 • Iron
 • Density = 13.0 g/cm^3

Seafloor spreading occurs at divergent plate boundaries.

When two plates separate and create new oceanic crust.

When plate boundaries diverge.



70

10. Where, why and how does seafloor spreading occur?

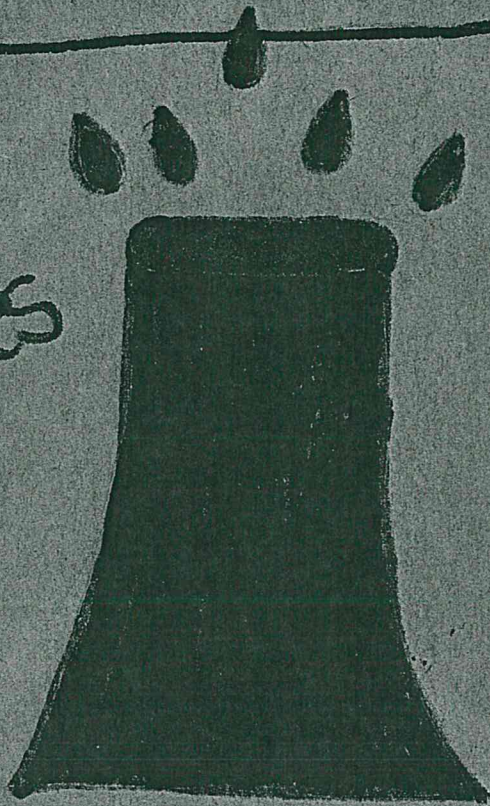
OPTIONAL
ANSWER
Q # 10

What do volcanoes and earthquakes have in common?

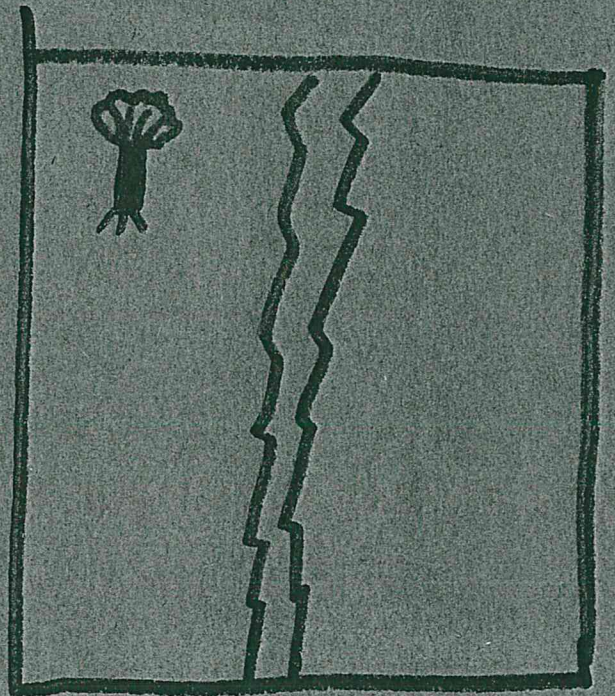
Q#11

2/11/2025

Volcanoes



Earthquakes



Occurs in places worldwide

Builds up by tectonic plate motion

Part of the Ring of Fire

Forms on convergent plate boundaries

Occurs in places worldwide

Builds up by tectonic plate motion

Part of the Ring of Fire

Forms on convergent plate boundaries