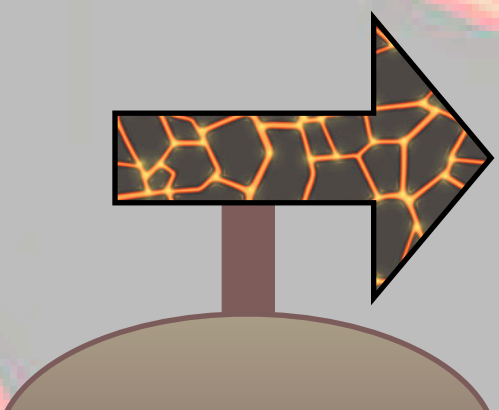


VOLCANOES

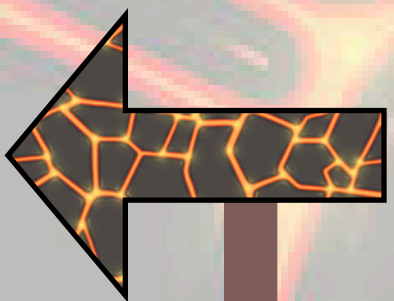
Learning Objective:

To explore what happens
when a volcano erupts.





What is happening here?



That's right!
The images
were showing
volcanoes
erupting!



What happens
when a volcano
erupts and why
do they erupt?
Think, pair, share



Let's talk about the Earth's structure. That will help you understand how volcanoes erupt.

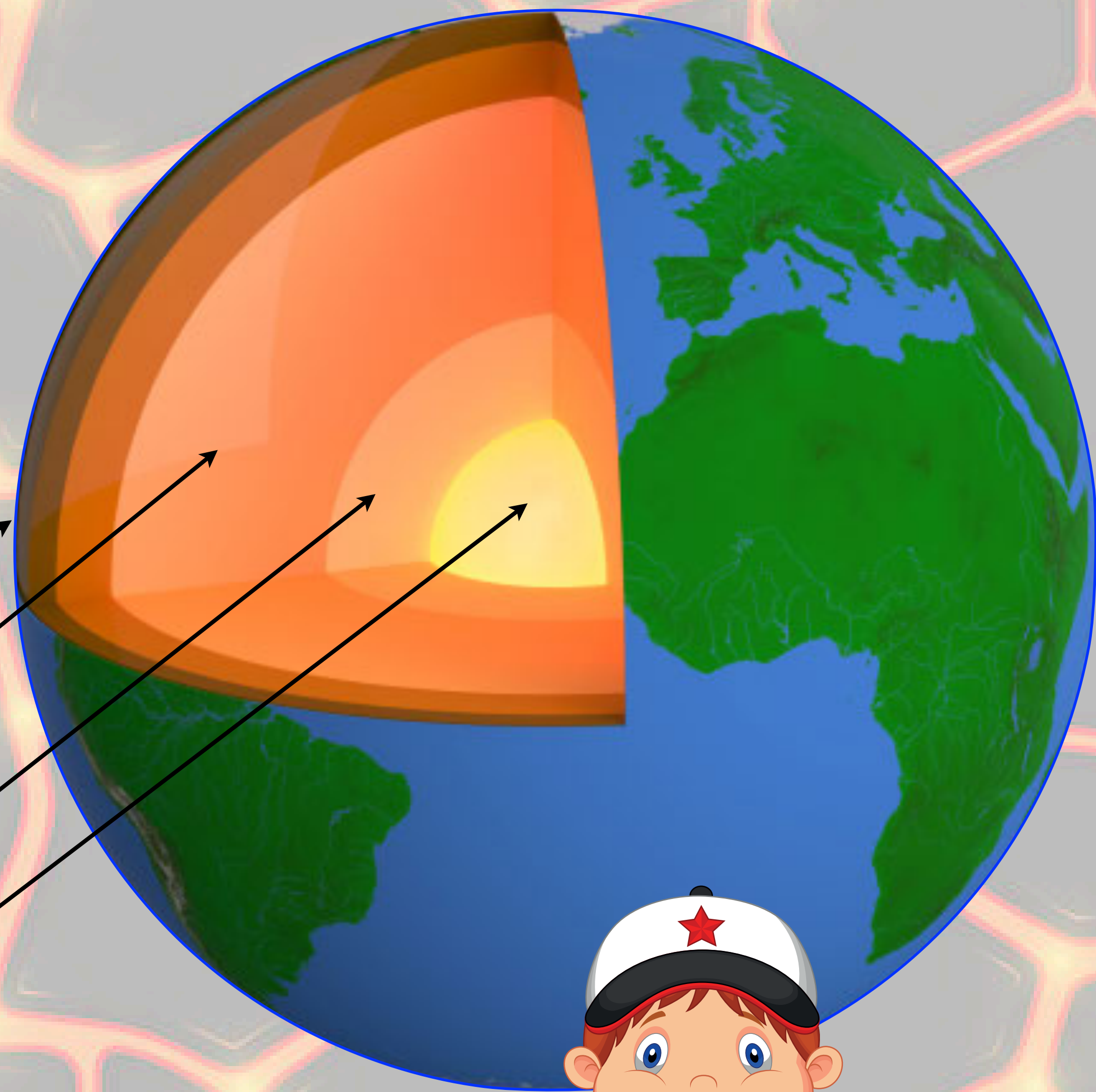
The Earth is made up of different layers.

The Crust

The Mantle

The Outer Core

The Inner Core



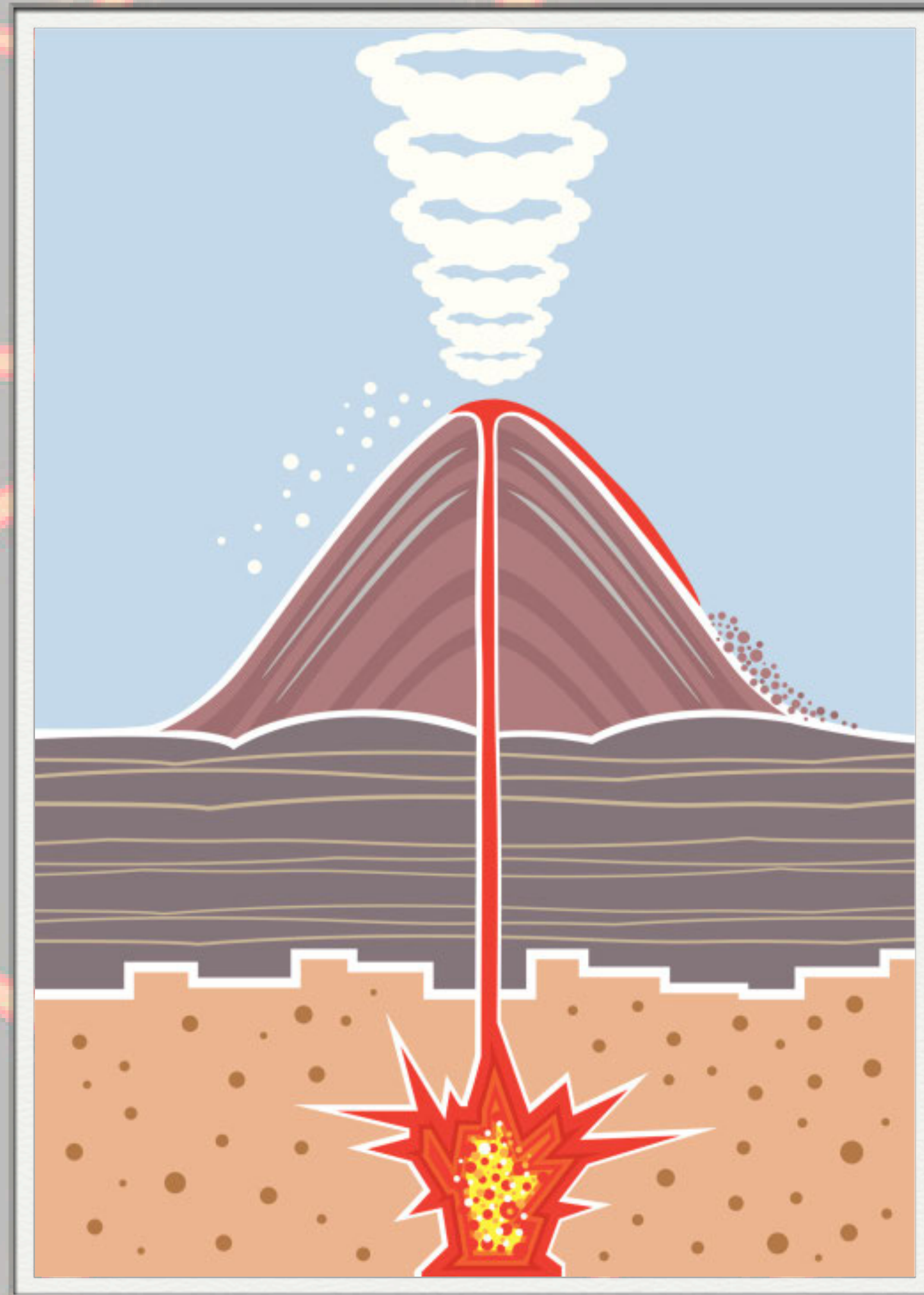
The **MANTLE** is made up of magma (gases and liquid rock). This becomes lava.



This is how a volcano erupts:

Firstly, magma rises through cracks in the volcano.

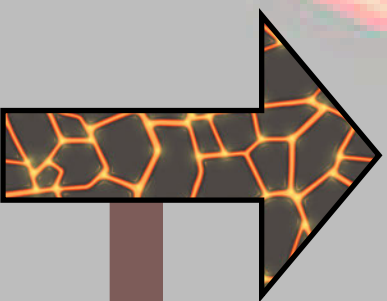
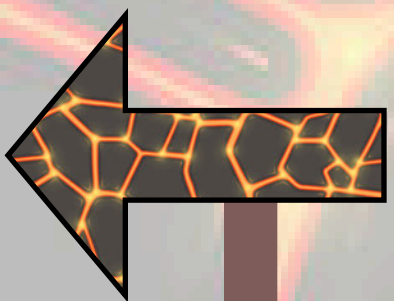
Then, pressure builds up inside the volcano.



The magma then explodes out of the volcano (this is known as lava).

When the lava cools it forms new crust/rock and the volcano becomes bigger.

Remember a volcano is an opening in the Earth's surface.





Magma is the reason volcanoes erupt.
If there is too much magma in the volcano chamber (this causes extreme pressure) it will erupt. The pressure needs to escape.

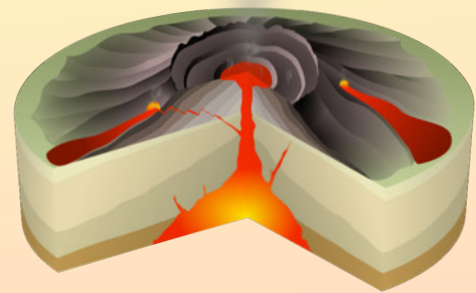
Did you know there are many different types of volcanic eruptions?

What do you think they are? Talk to a partner about them!

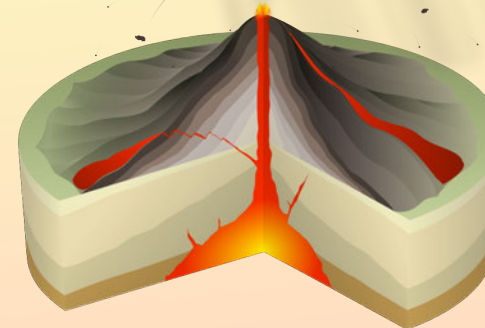


Here are some types of volcano eruptions.

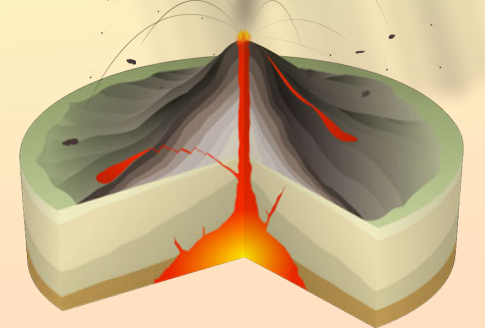
Hawaiian
Eruption



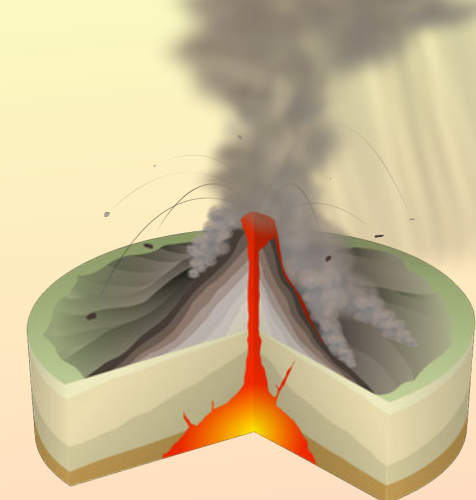
Strombolian
Eruption



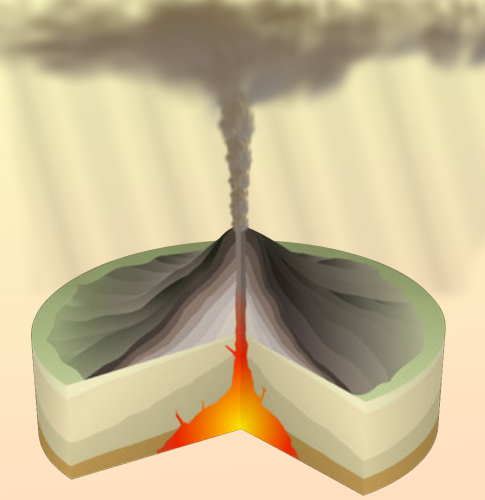
Vulcanian
Eruption



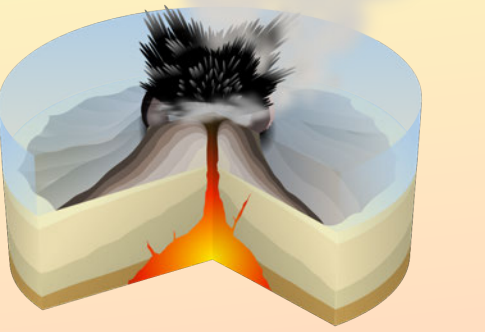
Pelean
Eruption



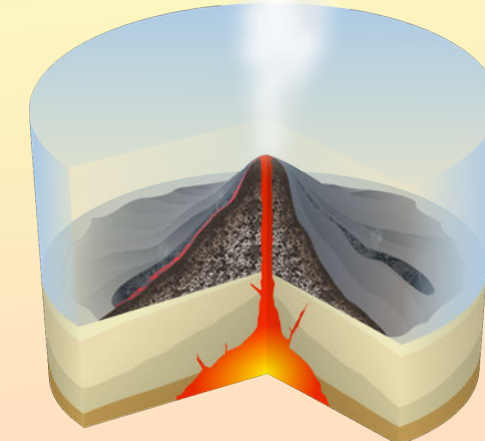
Plinian
Eruption



Surtseyan
Eruption



Submarine
Eruption



Harmful substances are released from volcanoes when they erupt.



Ash



Gas



Lava



Rocks



The harmful substances released during a volcano eruption can have a huge impact on human, animal and plant life in the area.

How do volcanoes affect people, plants and animals?

Volcanic ash and gas is very dense. When released, it can make it hard for people, animals and plants to breathe.

Lava flows can destroy people's homes and forests around the volcano base. They can also cause fires.

Ash and mud can mix with rain and melting snow, which creates mud flows that can quickly destroy the land.



The people of this town live here for a reason. The volcano could cause problems for the people and their houses.



What would you do if
you were near an
erupting volcano?

How would you
survive?

Think, Pair, Share

Plenary

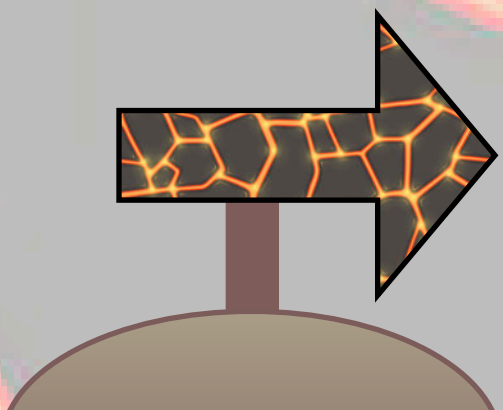
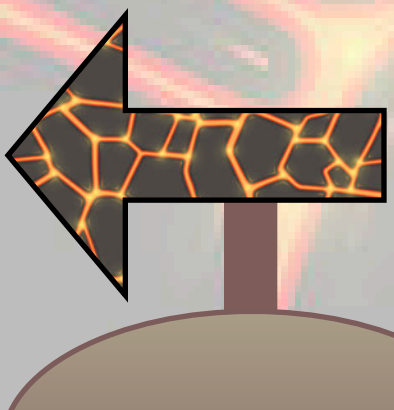
The magma then explodes out of the volcano (this is known as lava).

Firstly, magma rises through cracks in the volcano.

Then, pressure builds up inside the volcano.

When the lava cools it forms new crust/rock and the volcano becomes bigger.

Can you put these in order?
Can you explain how a volcano erupts?



Plenary

3

The magma then explodes out of the volcano (this is known as lava).

1

Firstly, magma rises through cracks in the volcano.

2

Then, pressure builds up inside the volcano.

4

When the lava cools it forms new crust/rock and the volcano becomes bigger.

Did you get the answer correct?

