Volcanoes!

How to write an explanation text

This Week...

This week we will be building up to writing an explanation text based on volcanoes.

Each day there will be a range of different spelling, vocabulary, grammar and punctuation activities that will help you to write your final piece of writing.

Before we write we will also look at WAGOLLs (What a good one looks like)

We will finally end the week with a reading activity, based on volcanoes.

If you have any questions you can always comment on Google Classroom or email us at UKS2@northbeckton.ttlt.academy and there is always someone around to help!

Monday

Technical Vocabulary

One thing that make explanation texts interesting, is their use of technical vocabulary. Can you match up the vocabulary to the correct definition?

_____: The layer between the crust and the outer core of the earth.

_____ : Molten (liquid) rock beneath the earth's surface.

_____ : A vent in the earth's surface from which lava and gases pour during an eruption.

_____ : A volcano that has erupted recently or is erupting now.

_____ : A light porous volcanic rock formed when lava cools.

_____ : Molten rock flowing from the vent of a volcano during an eruption.

_____ : The name of the process in which solids, liquids or gases are expelled through a vent in the earth's surface.

_____ : A volcano that hasn't erupted recently and is not expected to erupt again.

_____ : These are pieces of the rocky outer layer of the Earth known as the crust.

_____ : A volcano which has not erupted recently but is expected to erupt again.

_____ : The centre of the earth which is made of nickel and iron.

_____ : Tiny pieces of rock or lava blasted into the air during an eruption.

_____ : A roughly circular opening at the summit of the volcano.

- Core
- Eruption
- Tectonic plates
- Lava
- Active
- Magma
- Pumice
- Ash
- Crater
- Mantle
- Dormant
- Volcano
- Extinct

How did you do?

- **Mantle** : The layer between the crust and the outer core of the earth.
- **Magma** : Molten (liquid) rock beneath the earth's surface.
- **Volcano** : A vent in the earth's surface from which lava and gases pour during an eruption.
- **Active** : A volcano that has erupted recently or is erupting now.
- **Pumice** : A light porous volcanic rock formed when lava cools.
- **Lava** : Molten rock flowing from the vent of a volcano during an eruption.
- **Eruption** : The name of the process in which solids, liquids or gases are expelled through a vent in the earth's surface.
- **Extinct** : A volcano that hasn't erupted recently and is not expected to erupt again.
- **Tectonic plates** : Tectonic plates are pieces of the rocky outer layer of the Earth known as the crust.
- **Dormant** : A volcano which has not erupted recently but is expected to erupt again.
- **Core** : The centre of the earth which is made of nickel and iron.
- **Ash** : Tiny pieces of rock or lava blasted into the air during an eruption.
- **Crater** : A roughly circular opening at the summit of the volcano.

Tuesday

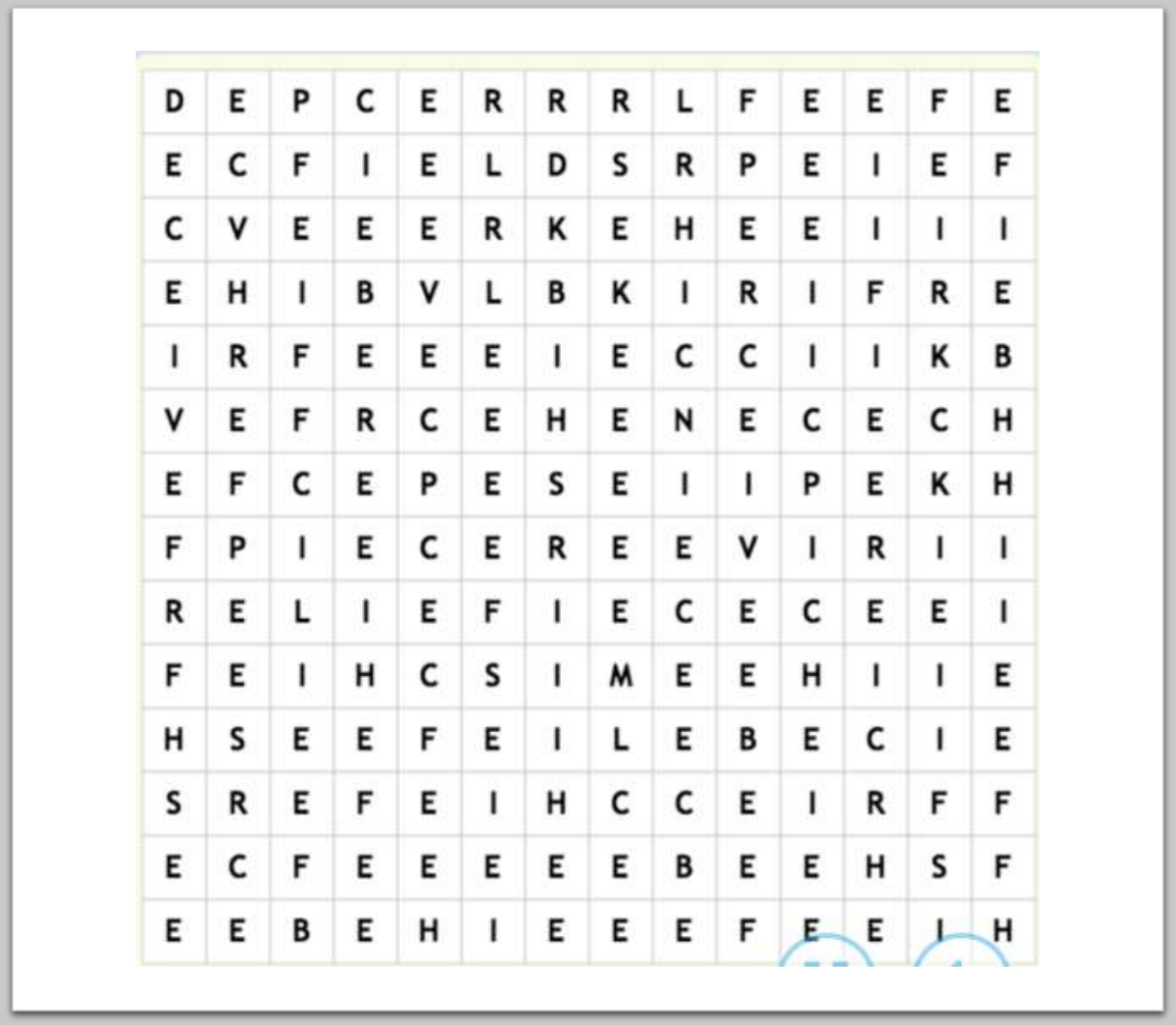
Spelling Challenge

spell words with the /i:/ sound spelt ei after c.

- **Choose the correct spelling.**
- field • feild • fieyld
- yeild • yieyld • yield
- breif • brief • brieef
- chief • cheif • cheef
- beleef • beleif • belief
- relief • releef • releif
- mischeef • mischief • mischeif
- niece • neice • neece
- peece • peice • piece
- shreek • shreik • shriek
- feirce • feerce • fierce
- recieve • reseeve • receive
- deseeve • deceive • decieve
- perseeve • percieve • perceive

Can you complete the word search?

- relief
- belief
- chief
- mischief
- perceive
- field
- yield
- brief
- niece
- piece
- shriek
- fierce
- receive
- deceive



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S	R	E	F	E	I	H	C	C	E	I	R	F	F
E	C	F	E	E	E	E	E	B	E	E	H	S	F
E	E	B	E	H	I	E	E	E	F	E	E	I	H

Spelling Challenge

- Including as many of the words from the spelling exercise, write your own sentences that describe the image.
- For example:
- Beyond the **field**, stood a monstrous beast that would never **yield**. For just a **brief** moment, ...

Wednesday

Punctuation Challenge

- Parenthesis is a word, phrase, or clause inserted into a sentence to add extra, subordinate or clarifying information. When a parenthesis is removed, the sentence still makes sense on its own.
- Brackets ( ) are also known as parentheses.
- Commas and dashes can also be used to show parenthesis.
- **For example**:
- As the raging river of lava rampaged toward the village **(where the residents were shrieking with panic)** it bubbled and hissed with ferocity.
- As the raging river of lava - that had been spewed out moments earlier **- rampaged towards the panic stricken village -** it bubbled gloriously and fiercely.
- **Write your own sentences to describe the journey of the lava.**

Punctuation Challenge

- What type of vocabulary could you use to describe the lava?

Thursday

Pop went the volcano!

Task

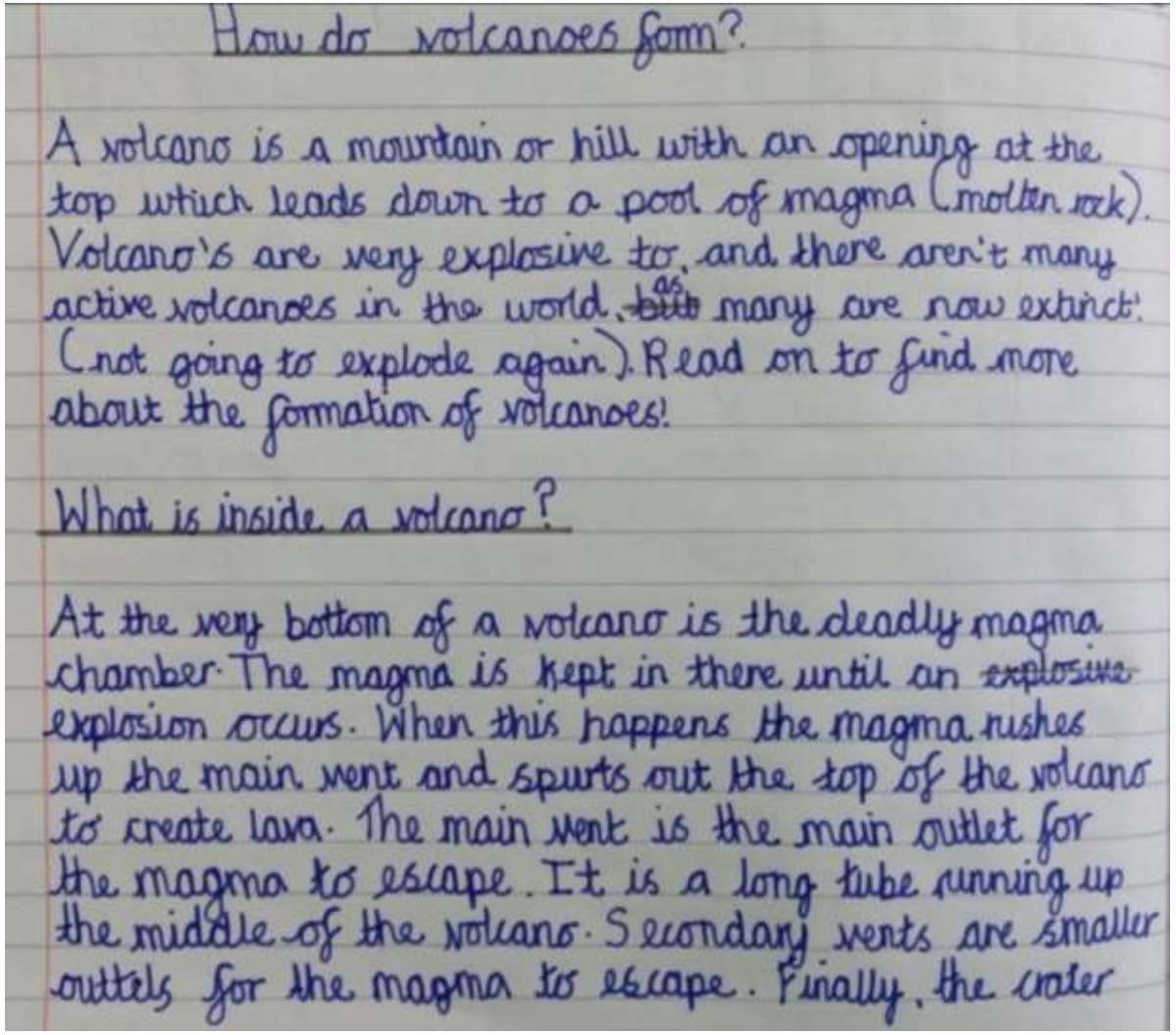
Write your own text explaining how a volcano erupts.

In this presentation, there are slides with technical vocabulary as well as information about how a volcano works and what causes them to erupt.

Read the information available carefully before you begin your own explanation text.

You could research the inner workings of volcanoes further however, you must make sure you have an adult's permission first!

WAGOLL – What do you think?

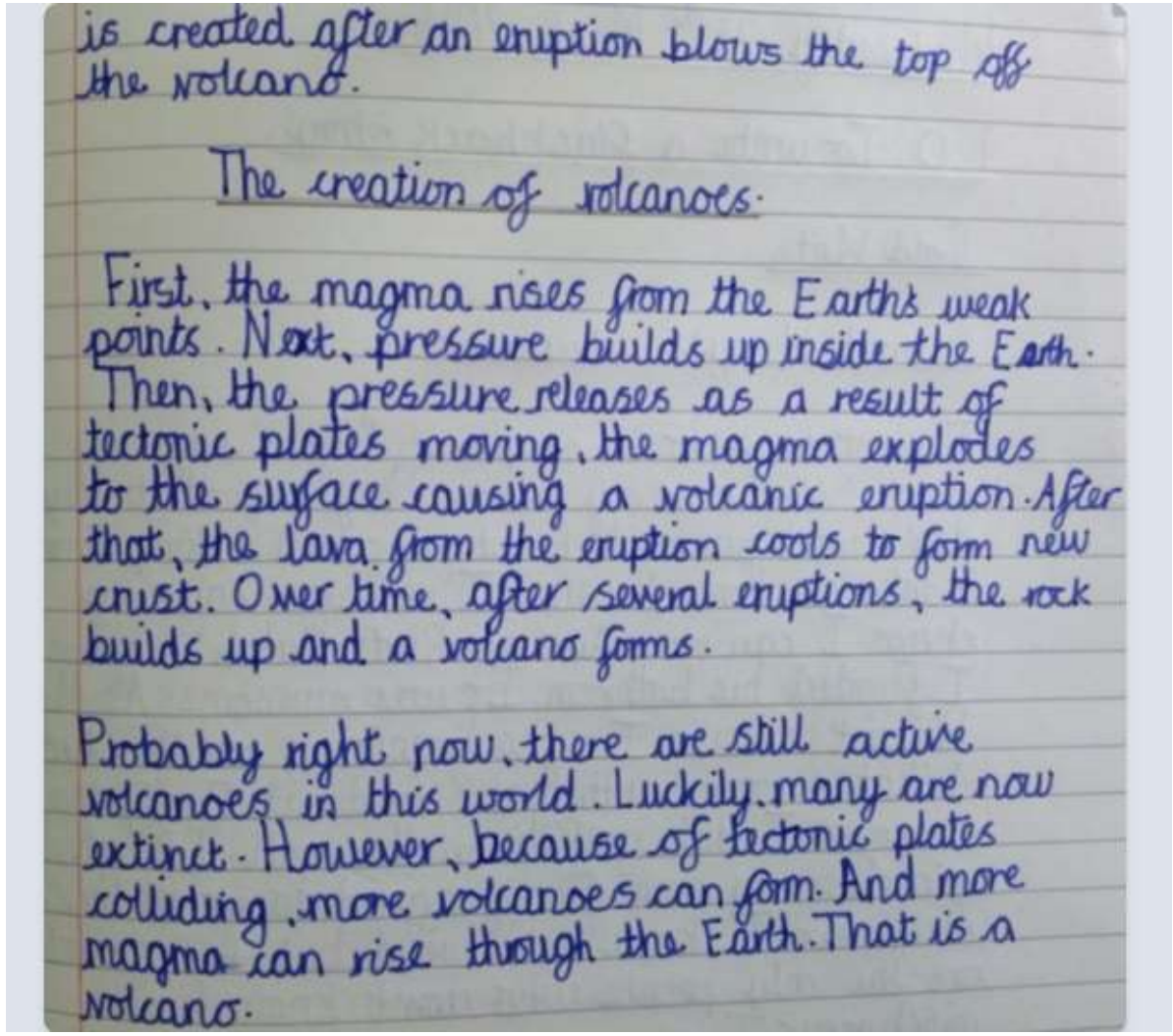


How do volcanoes form?

A volcano is a mountain or hill with an opening at the top which leads down to a pool of magma (molten rock). Volcano's are very explosive too, and there aren't many active volcanoes in the world, ~~but~~ as many are now extinct (not going to explode again). Read on to find more about the formation of volcanoes!

What is inside a volcano?

At the very bottom of a volcano is the deadly magma chamber. The magma is kept in there until an ~~explosive~~ explosion occurs. When this happens the magma rushes up the main vent and spurts out the top of the volcano to create lava. The main vent is the main outlet for the magma to escape. It is a long tube running up the middle of the volcano. Secondary vents are smaller outlets for the magma to escape. Finally, the crater



is created after an eruption blows the top off the volcano.

The creation of volcanoes.

First, the magma rises from the Earth's weak points. Next, pressure builds up inside the Earth. Then, the pressure releases as a result of tectonic plates moving, the magma explodes to the surface causing a volcanic eruption. After that, the lava from the eruption cools to form new crust. Over time, after several eruptions, the rock builds up and a volcano forms.

Probably right now, there are still active volcanoes in this world. Luckily, many are now extinct. However, because of tectonic plates colliding, more volcanoes can form. And more magma can rise through the Earth. That is a volcano.

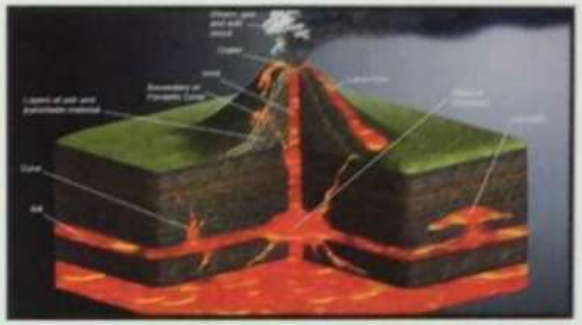
VOLATILE VOLCANOES

Imagine towns being drowned by lava, houses and people being burnt to death; causing buildings to be destroyed. Well this is just the beginning of an erupting volcano!

What is a volcano?

A volcano is a hill with a round-shaped hole on the top of it called a crater.

Inside a volcano is magma, rocks and lava. if the volcano erupts all of its lava will rush up over the crater and run down the hill and hit whatever's below it.



What causes volcanoes to erupt?

There are many ways for a volcano to erupt.

One of them is when two tectonic plates split apart; causing magma to rise into the gap. Another way that a volcano can erupt is when two tectonic plates push together, and when they cannot take any more pressure one slides under the other and melts; causing magma to push through the other plate. A hot spot is where a steam of rising magma scald's a hole in the middle of the tectonic plate, they are usually found above mantle plumes.

Where can you find volcanoes?

Volcanoes are found on the edge of tectonic plates, they are also found around pacific plates.

There are over 1,500 active volcanoes in the whole world! Volcanoes can form under oceans, and the top of them can stick up above the water's surface to create an island.

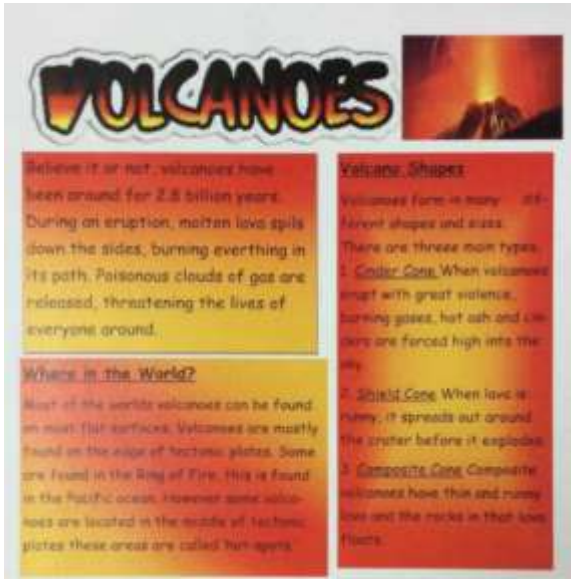
Types of volcanoes

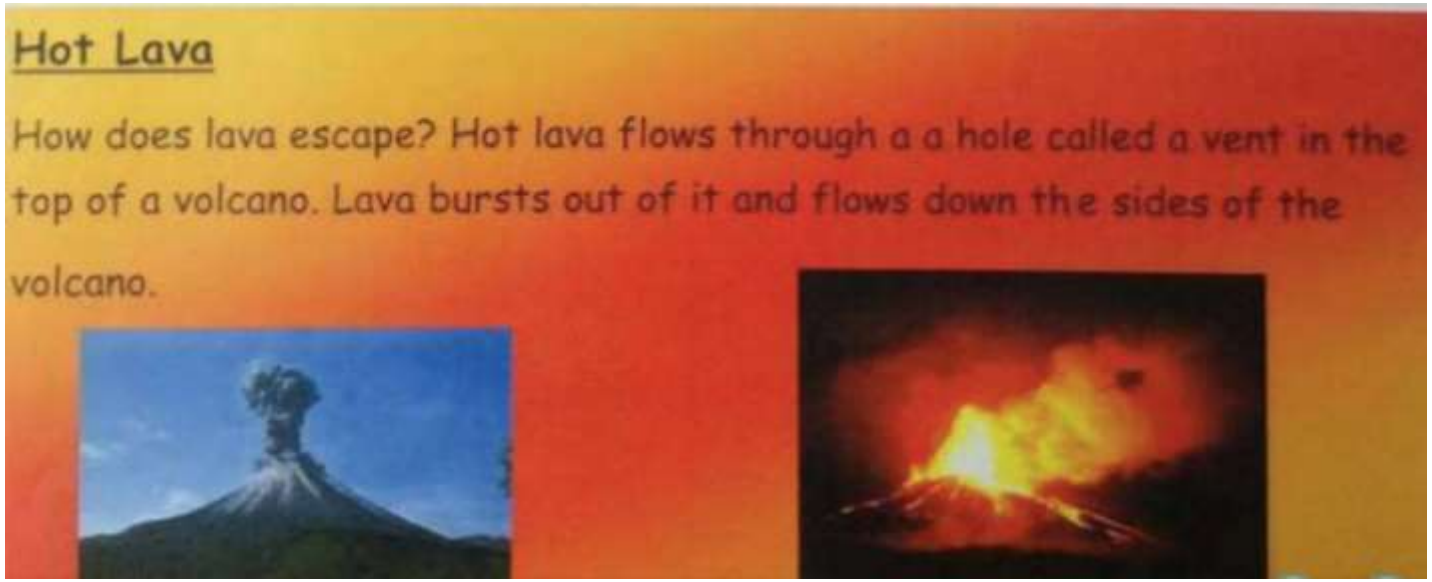
On the earth, there are three different types of volcanoes. Not all of them look the same as each other. The three different types are:

1. The first type is the cinder cone volcano, the lava inside is thick and sticky. This volcano is very small and very steep all the way up to the crater.
2. The shield volcano is the next type, unlike cinder volcanoes, this one is large but not very steep. The lava is thin and runny inside.
3. The last volcano is called the strato volcano, this volcano is quite large and it's sides are steep. Inside, the lava tells of cinder and is quite runny.

WAGOLL – What do you think?

WAGOLL – What do you think?





Steps to Success

Write your explanation text following the steps to success. You can type your writing onto a blank document of you can create it in your home learning book.

Get creative! How do you want to present it? Do you want it to be a double page spread? Do you want it to be a leaflet?

- **Use cohesive devices to guide the reader.**
- **Involve the reader.**
- **Punctuate every sentence accurately.**
- **Use headings and sub-headings.**
- **Use bullet points and diagrams.**
- **Use appropriate vocabulary, including technical terms.**
- **Structure your writing so that it is in the correct order and easy to follow.**

Friday

Reading Challenge

- **Read the following carefully and answer the questions on the next slide.**
- The word 'volcano' comes from the island ‘Vulcano’, which is a volcanic island in Italy. The island actually gets its name from the Roman god of fire – Vulcan.
- **What Is Our Earth Made Of?**
- The Outer Core
- The outer core is a liquid layer made out of molten iron and nickel. This liquid metal creates the earth's magnetic field.
- The Crust
- This is the outer layer of the earth. It varies in thickness from 0 – 60km thick. It is not even and is made up of pieces which overlap to cover the entire planet. These pieces are called ‘tectonic plates’.
- The Mantle
- The mantle is approximately 2897km thick and is made of a solid, rocky substance called molten rock or magma. This is what escapes when a volcano erupts.
- The inner core
- This is a solid layer and is made of iron and nickel. It is the hottest part of the earth and can reach temperatures of up to 5500ºC!

Continued…

- **How Are Volcanoes Formed?**
- Deep in the earth, it is extremely hot. It is so hot, in fact, that rocks actually melt and form magma, which makes up the mantle of the earth.
- The upper mantle mixes and moves, which creates pressure underneath the crust. This pressure can sometimes cause the mantle to leak out onto the surface of the earth: this is a volcano!
- Over time, as this magma leaks out, the volcano will get bigger and bigger.

- **Why do volcanoes erupt?**
- We know that the earth's crust is made up of huge slabs called tectonic plates. These fit together like a jigsaw puzzle and they sometimes move.
- The movement causes friction which causes earthquakes and volcanic eruptions near the edges of the plates. The theory that explains this process is called ‘plate tectonics’ – this means the plates are moving in different directions and at different speeds. Sometimes they collide or brush past each other and cause these earthquakes and volcanic eruptions.

Questions…

Read the questions carefully and answer them as fully as possible.

1.Explain why volcanoes are given the name, volcanoes.

2.What escapes when a volcano erupts?

3.How does a volcano increase in size over time?

4.Explain how the tectonic plates are involved in a volcanic eruption.

5.What is the outer core made up of?

6.How thick is the mantle?

Challenge: Can you use PEE in your answers?