

Thursday 11th November

LO: How a mountain is formed

What are mountains?

Do you know any?



names of individual mountains

mountain ranges,

weather,

uses of mountains,

explorers,

key words/vocabulary



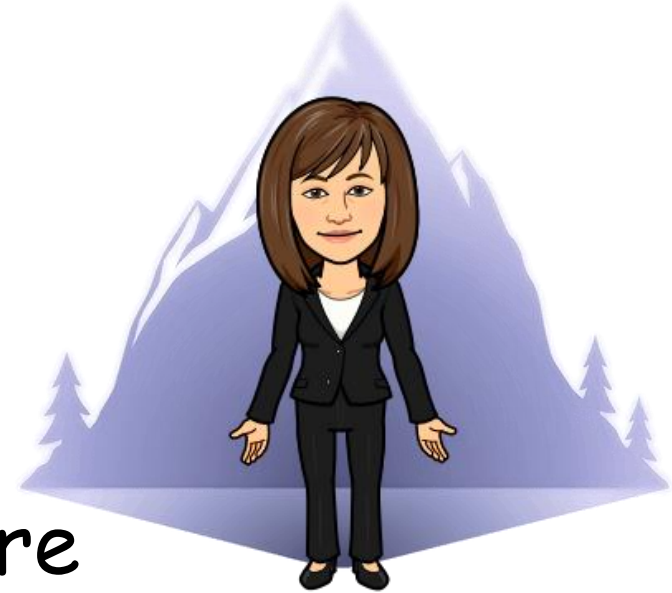
What are mountains?

- A mountain is part of the land that rises above everything else.
- A mountain is higher and steeper than a hill. Its sides are made up of steep slopes.
- Mountains need to be taller than 600m in height
- Land which is lower than 600metres in height, is known as hills.



What are mountains?

- Mountains can stand alone (in isolation) or they can be found in groups (mountain ranges).
- When mountain ranges are found together they are known as mountain chains.
- Some of the tallest mountains in England are found in the Lake District. Scafell Pike is the highest point in the county of Cumbria, measuring 978 metres high.



Tectonic Plates



- The Earth's surface is called the crust.
- The crust is made up of 6 huge slabs called plates which fit together like a jigsaw puzzle.
- These plates slowly move (approximately 2cm a year)

Thursday 18th November

LO: Tectonic plates

- The Earth's surface is called the crust.
- The crust is made up of 6 huge slabs called plates which fit together like a jigsaw puzzle.
- These plates move slowly (2cm a year).
- The movement of the plates is a way mountains can form.
- Let's learn the continent song!

- The movement of tectonic plates is one way that mountains are formed.
- There are five different types of mountains:
 1. Fold mountains
 2. Fault-block mountains
 3. Dome mountains
 4. Volcanic Mountains
 5. Plateau Mountains

Fold Mountains

1. Use 2 slices of bread flat in front of you, side by side.
2. Push from the outside of each slice of bread together in until they make a fold.



The bread represents tectonic plates crashing into each other (this happens over a long period of time!)

Fold Mountains



1. The tectonic plates crash into each other.
2. The pressure causes them to fold together and push up.
3. This happens over a long period of time.
4. These are the most common mountains



Fold Mountains:



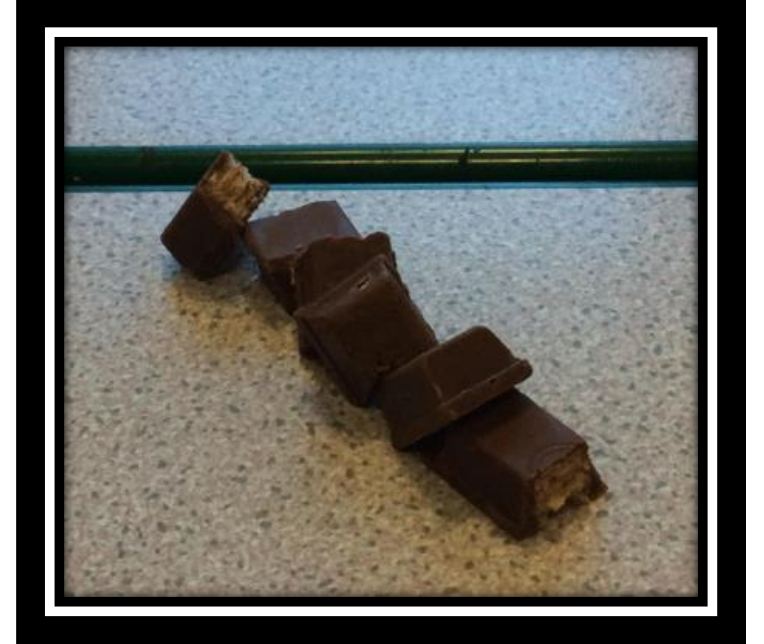
Alps in Europe



Andes in South America

Fault-Block Mountains

1. Break a finger of a Kit Kat into blocks to represent a plate cracking and breaking.
2. Push the blocks together.



- These mountains form when cracks in the earth's crust force some blocks of rock up and others down.
- Instead of the earth folding over, the earth's crust pulls apart (fractures)
- It breaks up into blocks or chunks.
- As they move apart blocks of rock end up being stacked on one another.

Fault-block Mountains

- A fault-block mountain is formed when a crack appears in the Earth's crust.
- A plate breaks into a block.
- Some parts rise up, others sink down.
- As they move apart, blocks of rock end up being stacked on one another.

Fault-Block Mountains

Sierra Nevada in North America



Volcanic Mountains

1. Use a plastic bottle containing baking soda and red food colouring. Cover it with paper to make the mountain shape.
2. Add some vinegar and watch the reaction!



- Volcanic Mountains are formed when molten rock (magma) erupts, and piles upon the surface.
- When the ash and lava cools, it builds a cone of rock.
- Rock and lava pile up, layer on top of layer

Volcanic Mountains

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Volcanic mountains



- Vesuvius is the only volcano on the European mainland to have erupted within the last hundred years.
- Today, it is regarded as one of the most dangerous volcanoes in the world because of how close it is to the city of Naples. It has violent, explosive eruptions when it does erupt!



St Vincent in the Caribbean - one of the more recent volcanoes to erupt.

Dome Mountains

1. Use a piece of fabric or tissue paper over a balloon.

2. Start to blow up the balloon.



- Dome Mountains are the result of melted rock (magma) pushing its way up under the earth crust.
- Without actually erupting onto the surface, the magma pushes up overlaying rock layers.

Dome Mountains

- Dome Mountains are the result of melted rock (magma) pushing its way up under the earth crust.
- Without actually erupting onto the surface, the magma pushes up overlaying rock layers.
- When it cools it forms a dome shape.

Dome Mountains



Plateau Mountains

1. Put the tray of sand inside the larger tray.
2. Put your blocks so your tray of sand is slightly higher at one end than at the other.
3. Slowly pour the water into the higher end of the sand tray.

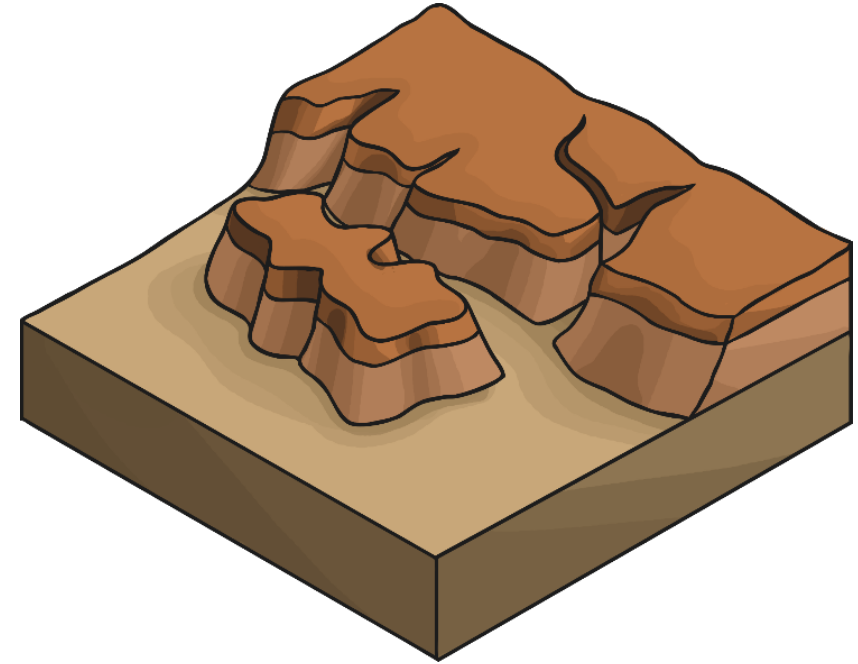


They form because of materials being taken away through erosion, which has left deep valleys or gorges next to high cliffs.

Plateau Mountains

- Plateau Mountains are formed when water erodes the land around it (erosion)
- They are formed next to large cliffs.
- They leave deep valleys next to the cliffs.

Plateau Mountains



Tasmanian
mountains

Let's recap:

- <https://www.youtube.com/watch?v=S9ty-ta1wyl>

Dictionary game!

- What do we know....