



How Mountains are Made

twinkl

Can You Remember What's under Your Feet?

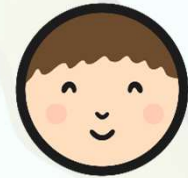
The Earth's crust isn't one solid layer.

It is broken up into huge areas called tectonic plates that float on top of the mantle.

This map shows where the tectonic plates are.



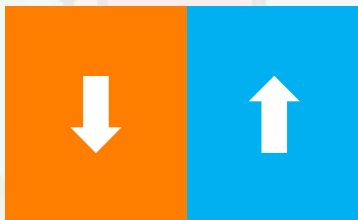
How Can You Move Your Plates?



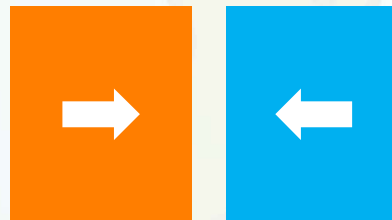
Use the two pieces of paper you have been given.

Lay your “plates” flat onto the table.

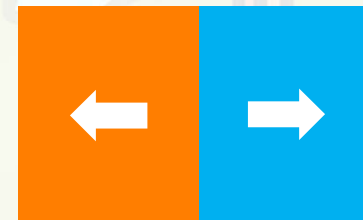
How many different ways can you move the plates around?



**Rubbing
together**



**Towards
each other**



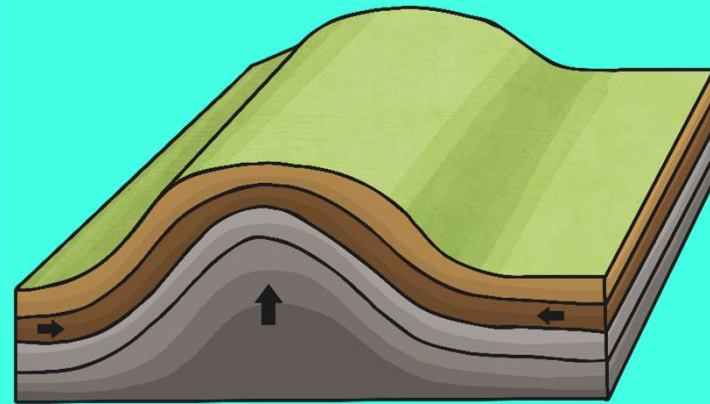
**Away from
each other**

Fold Mountains

Fold mountains occur when tectonic plates collide.

The edges of the plates crumple as they are pushed together.

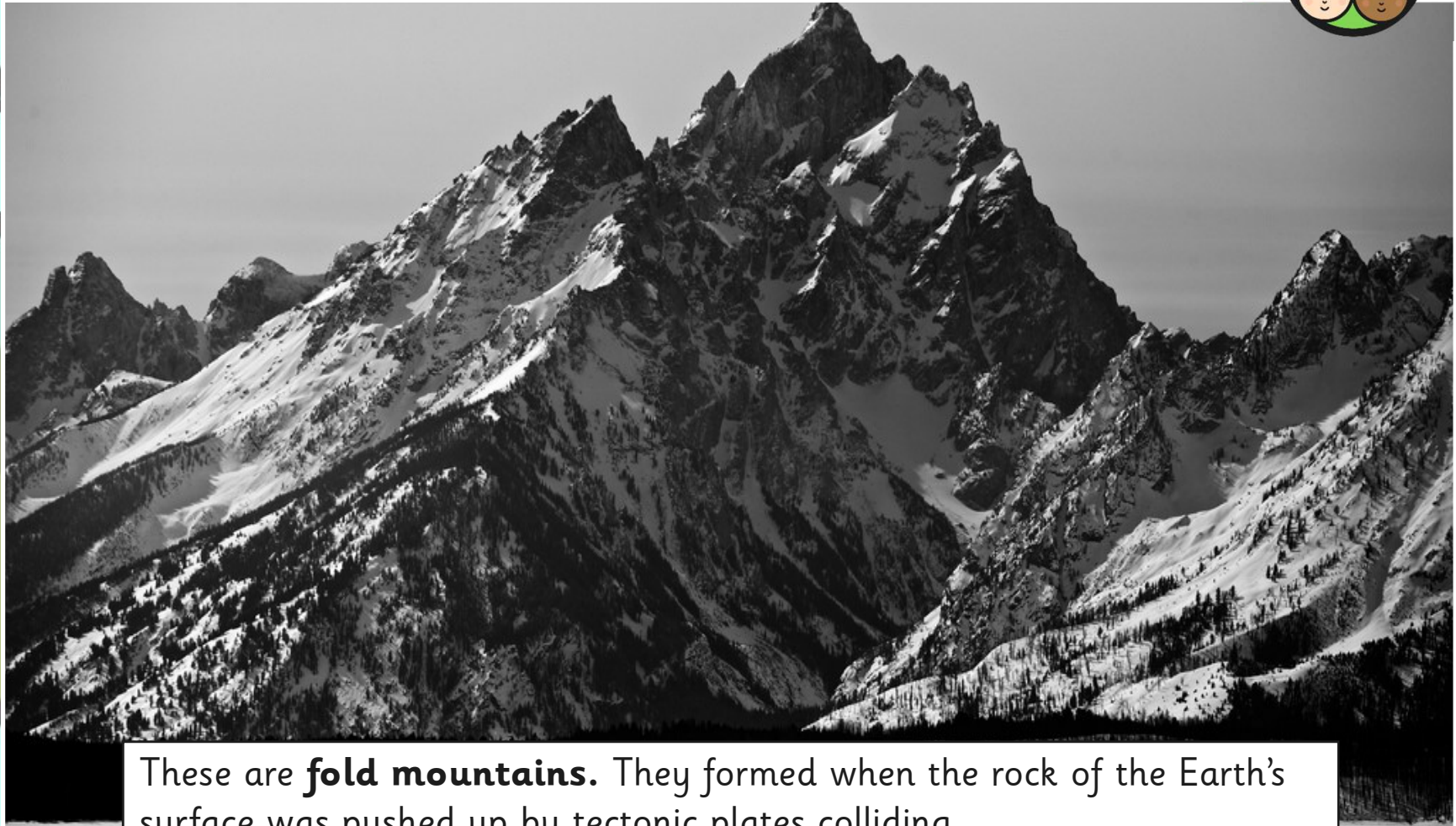
The rock of the Earth's surface is pushed up to create mountains.



The Alps are fold mountains.

Photo courtesy of Tambako the (@flickr.com) - granted under creative commons licence – attribution

How Were These Mountains Made?



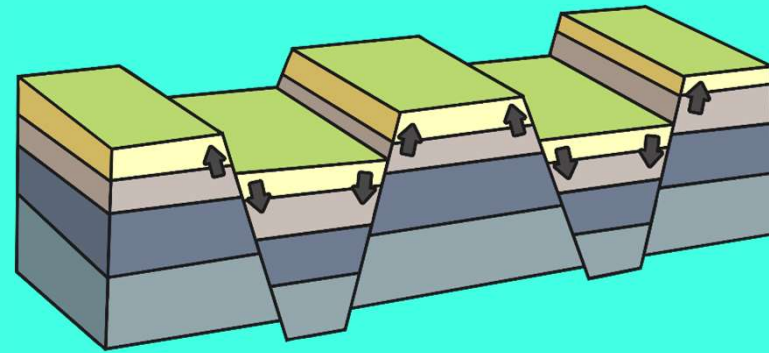
These are **fold mountains**. They formed when the rock of the Earth's surface was pushed up by tectonic plates colliding.

Photo courtesy of Zach Dischner @flickr.com) - granted under creative commons licence – attribution

Fault-block Mountains

When cracks in the Earth's surface open up, large chunks of rock can be pushed up while others are pushed down.

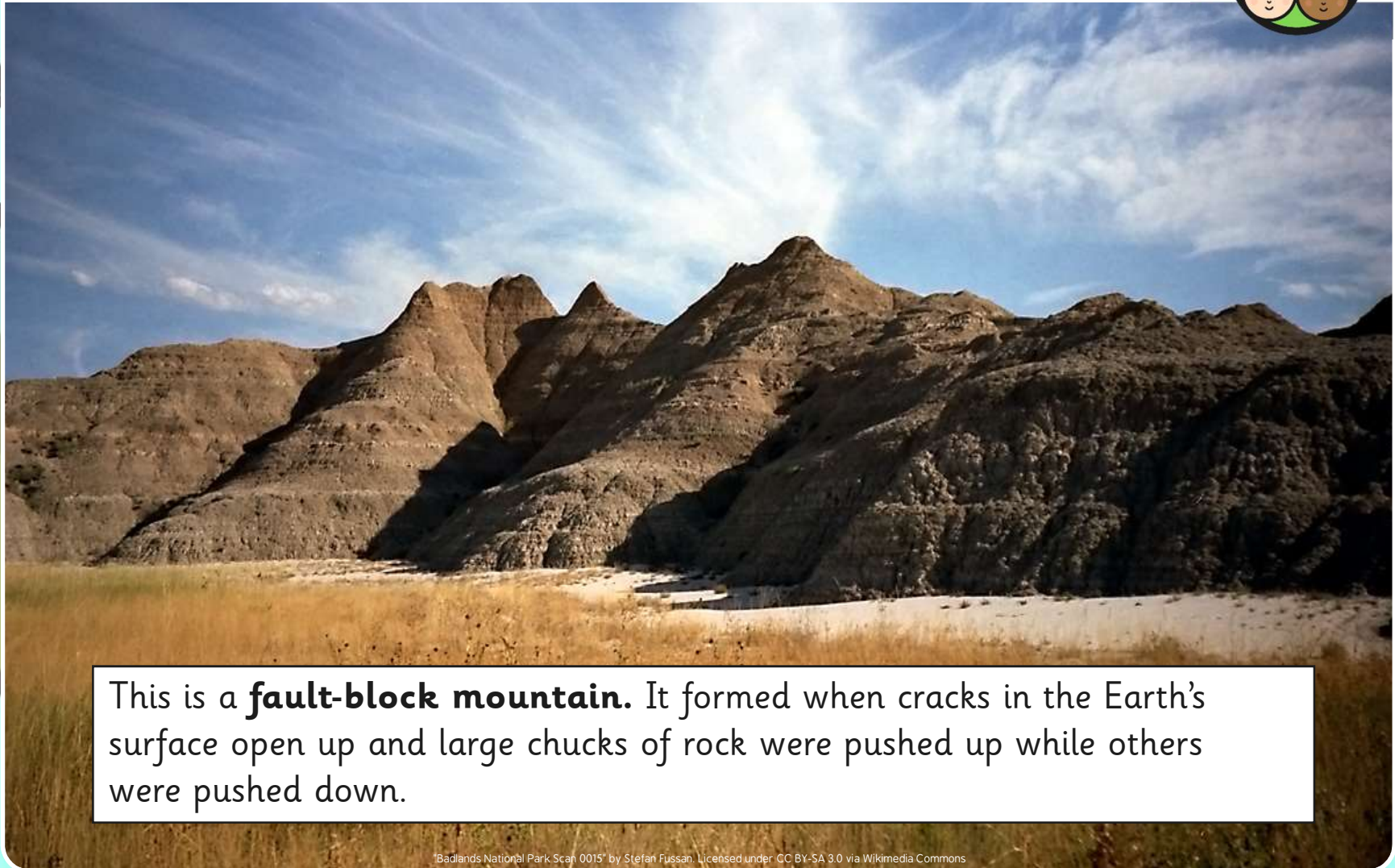
This creates mountains with a long slope on one side, and a sharp drop on the other.



The Sierra Nevada mountains in California, USA are fault-block mountains.

Photo courtesy Ken Lund (@flickr.com) - granted under creative commons licence – attribution

How Were These Mountains Made?



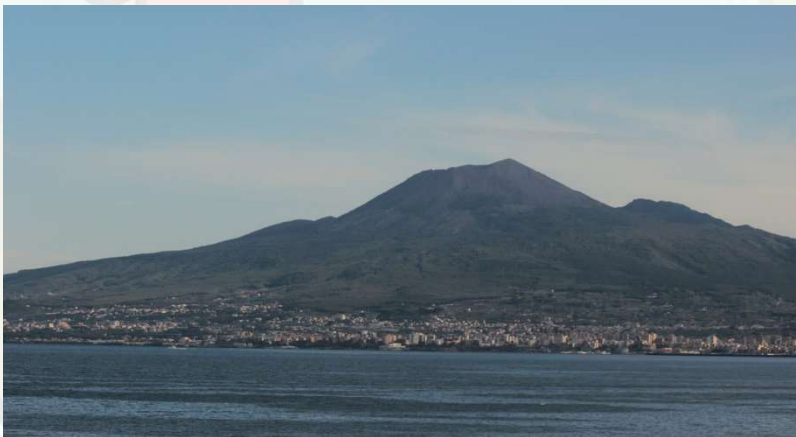
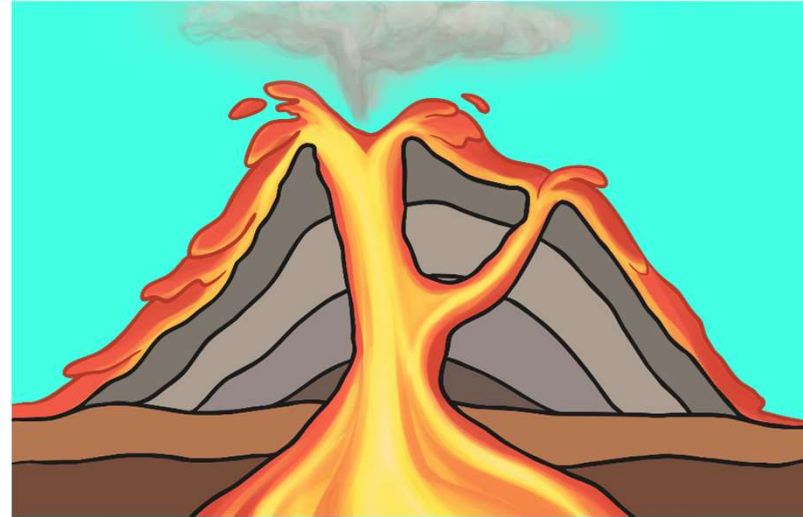
This is a **fault-block mountain**. It formed when cracks in the Earth's surface open up and large chunks of rock were pushed up while others were pushed down.

"Badlands National Park Scan 0015" by Stefan Fussen. Licensed under CC BY-SA 3.0 via Wikimedia Commons

Volcanic Mountains

Volcanic mountains are formed around volcanoes.

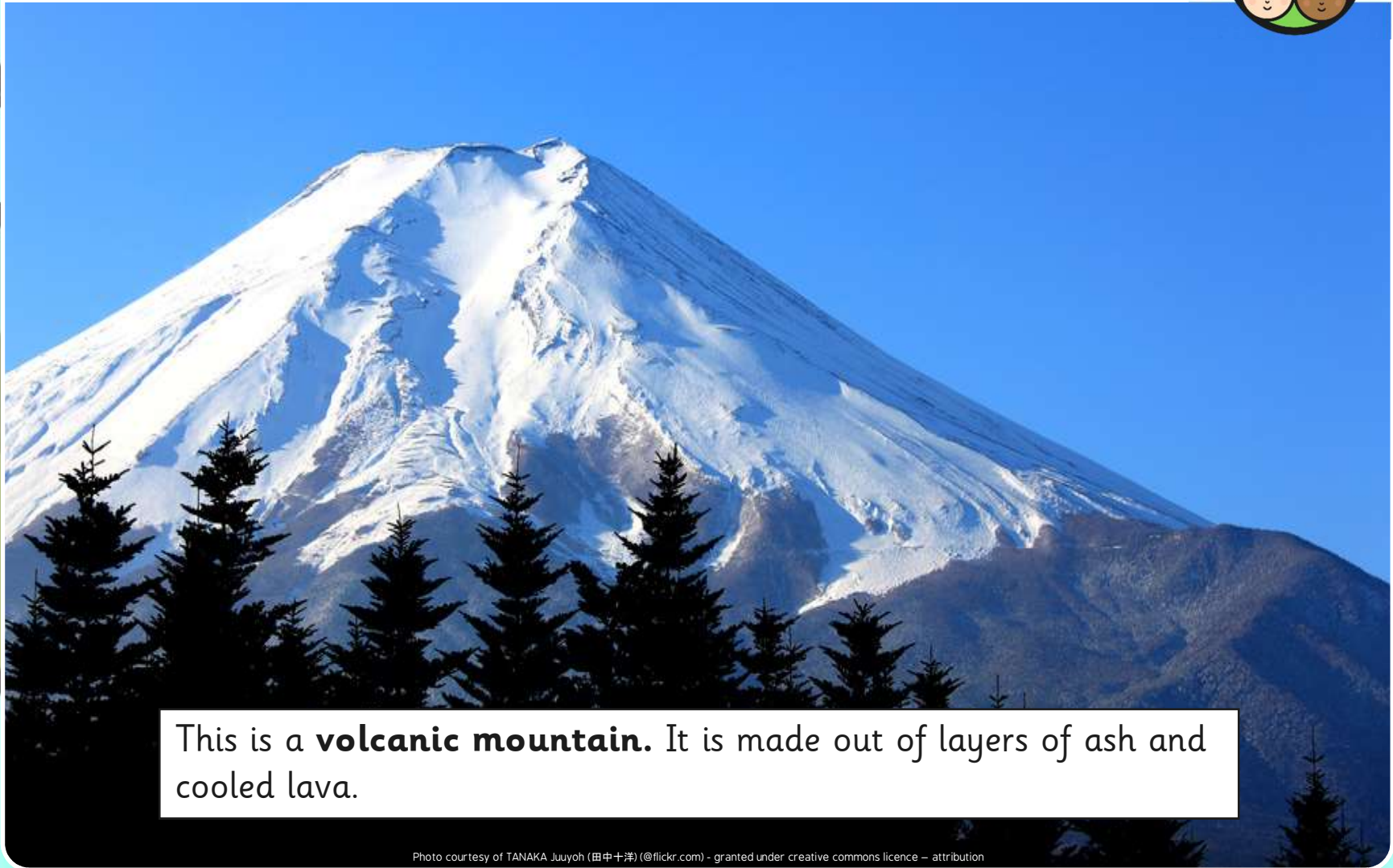
Volcanic mountains are made of layers of ash and cooled lava.



Mount Vesuvius, Italy is a volcanic mountain.

Photo courtesy of DragonGhost19 (@flickr.com) - granted under creative commons licence – attribution

How Were These Mountains Made?



This is a **volcanic mountain**. It is made out of layers of ash and cooled lava.

Photo courtesy of TANAKA Juuyoh (田中十洋) (@flickr.com) - granted under creative commons licence – attribution

Dome Mountains

Dome mountains are smooth and round-looking.

They are formed when magma is forced up between the crust and the mantle, but doesn't ever flow out.

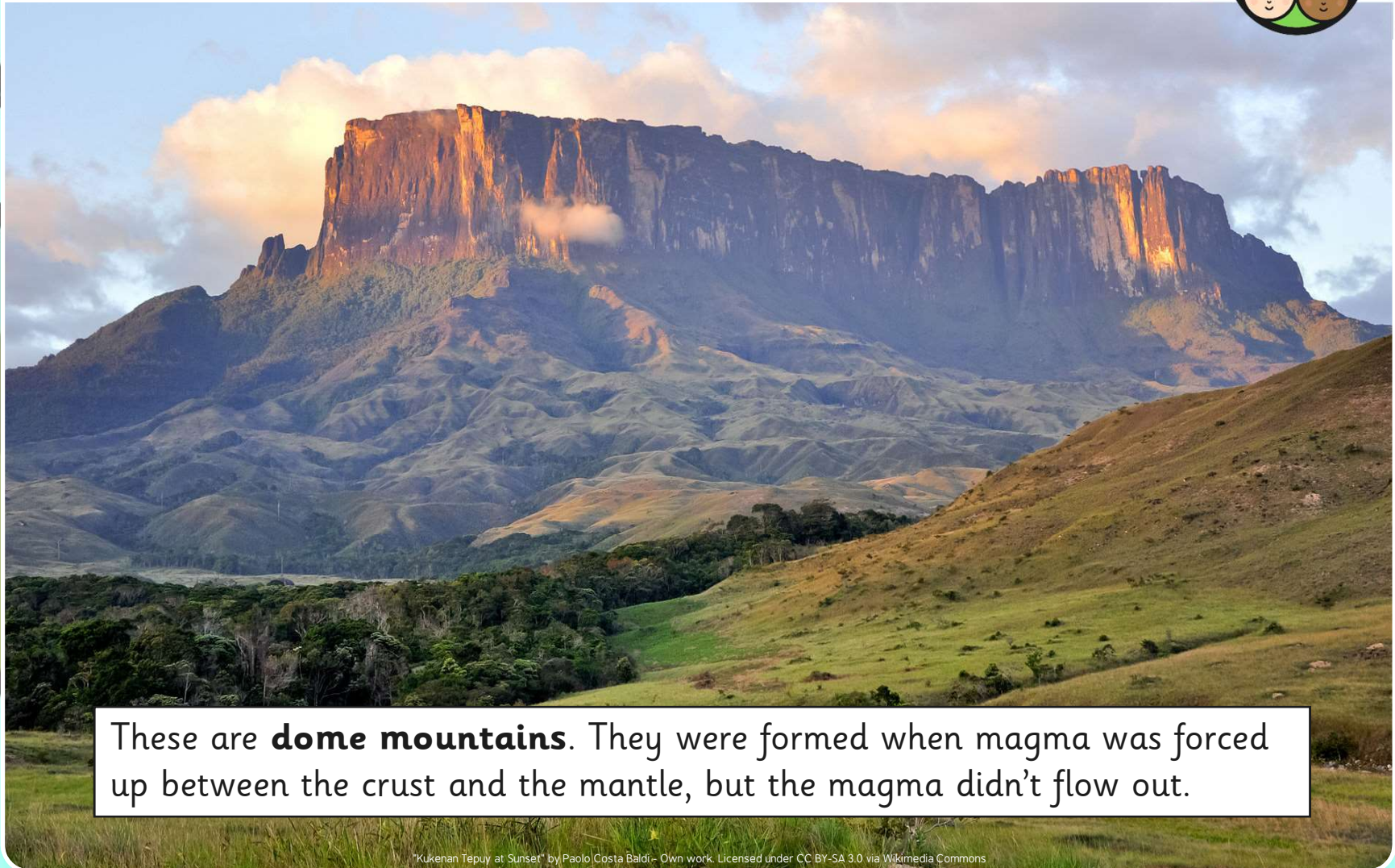
The magma makes the land bubble up like a balloon.



**Devils Tower, USA
is a dome mountain.**

Photo courtesy of inkknife_2000 @flickr.com) - granted under creative commons licence – attribution

How Were These Mountains Made?



These are **dome mountains**. They were formed when magma was forced up between the crust and the mantle, but the magma didn't flow out.

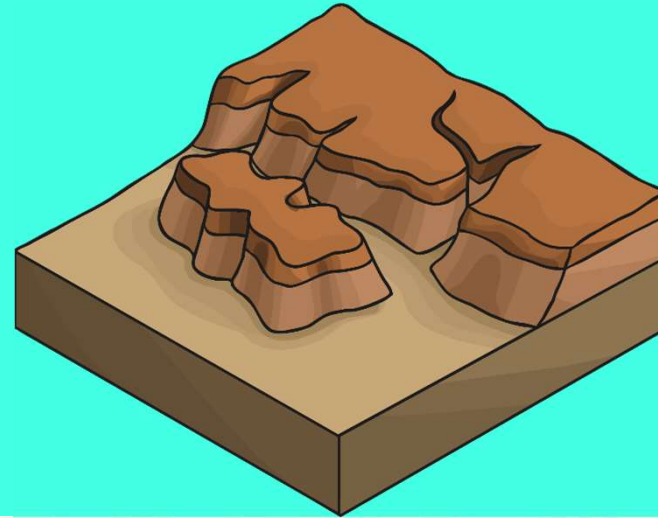
"Kukenan Tepuy at Sunset" by Paolo Costa Baldi - Own work. Licensed under CC BY-SA 3.0 via Wikimedia Commons

Plateau Mountains

Plateau mountains are different from the other mountain types.

They haven't formed because of rock or magma being pushed up.

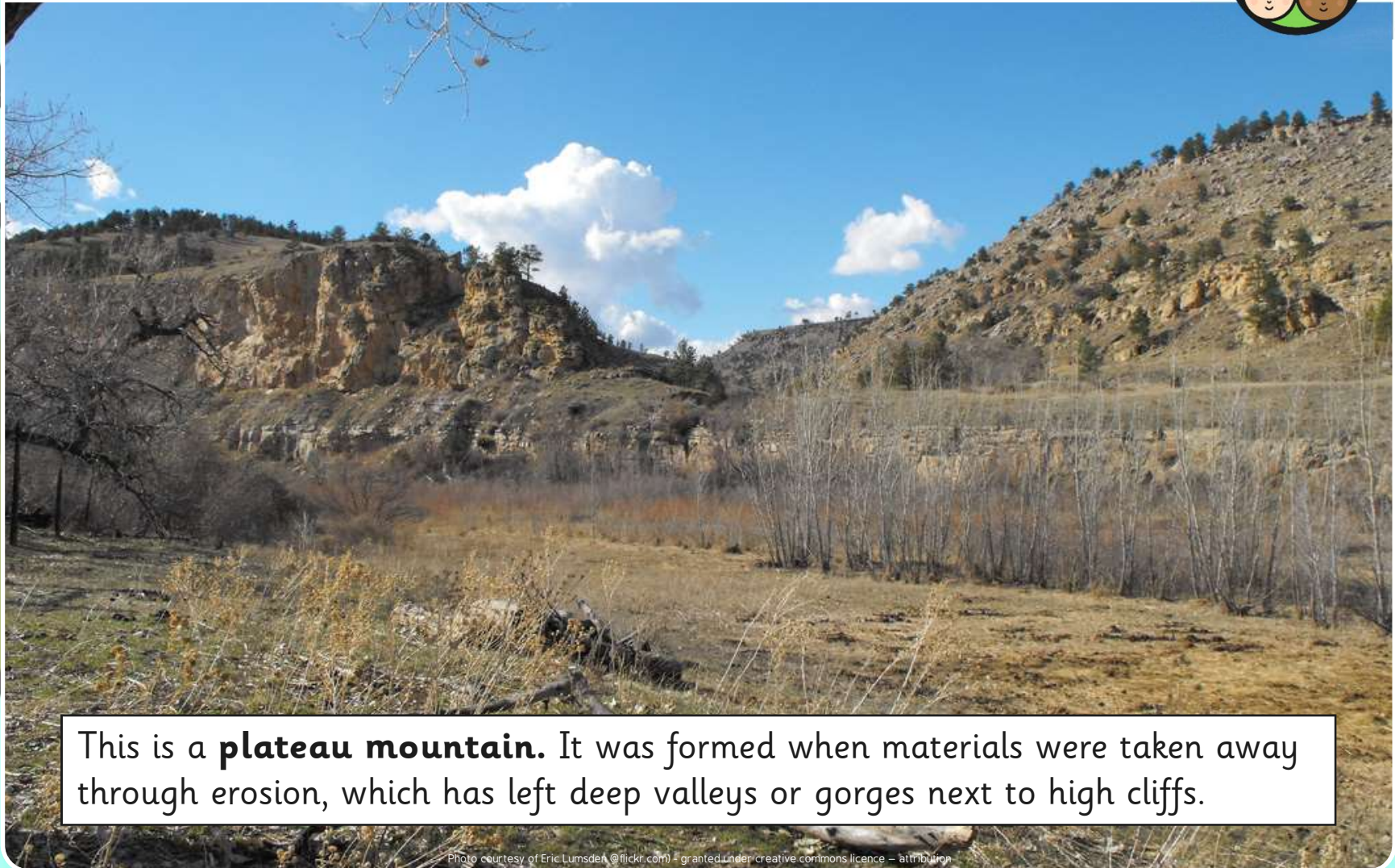
They form because of materials being taken away through erosion, which has left deep valleys or gorges next to high cliffs.



The Allegheny Mountains, USA, are an example of this type of mountain.

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How Were These Mountains Made?



This is a **plateau mountain**. It was formed when materials were taken away through erosion, which has left deep valleys or gorges next to high cliffs.

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