







# HOW ARE MOUNTAINS MADE?

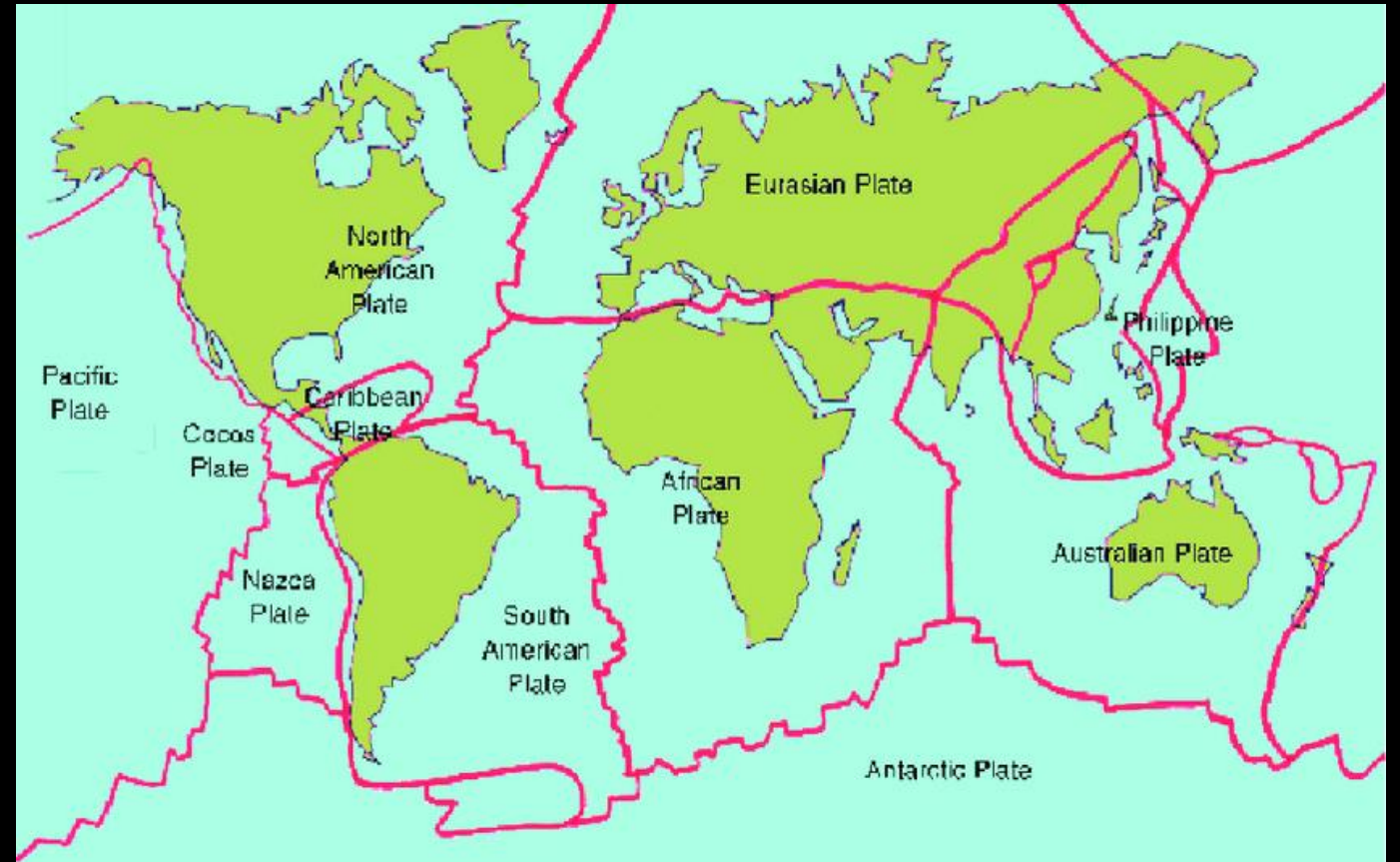
By Merryn Macnair

# MOUNTAINS

- We've all heard of mountains but have you ever wondered how they're made?
- After you have gone through this PowerPoint I hope you leave with more knowledge of how mountains are made than before you read it.
- If not then you wasted your time reading this.

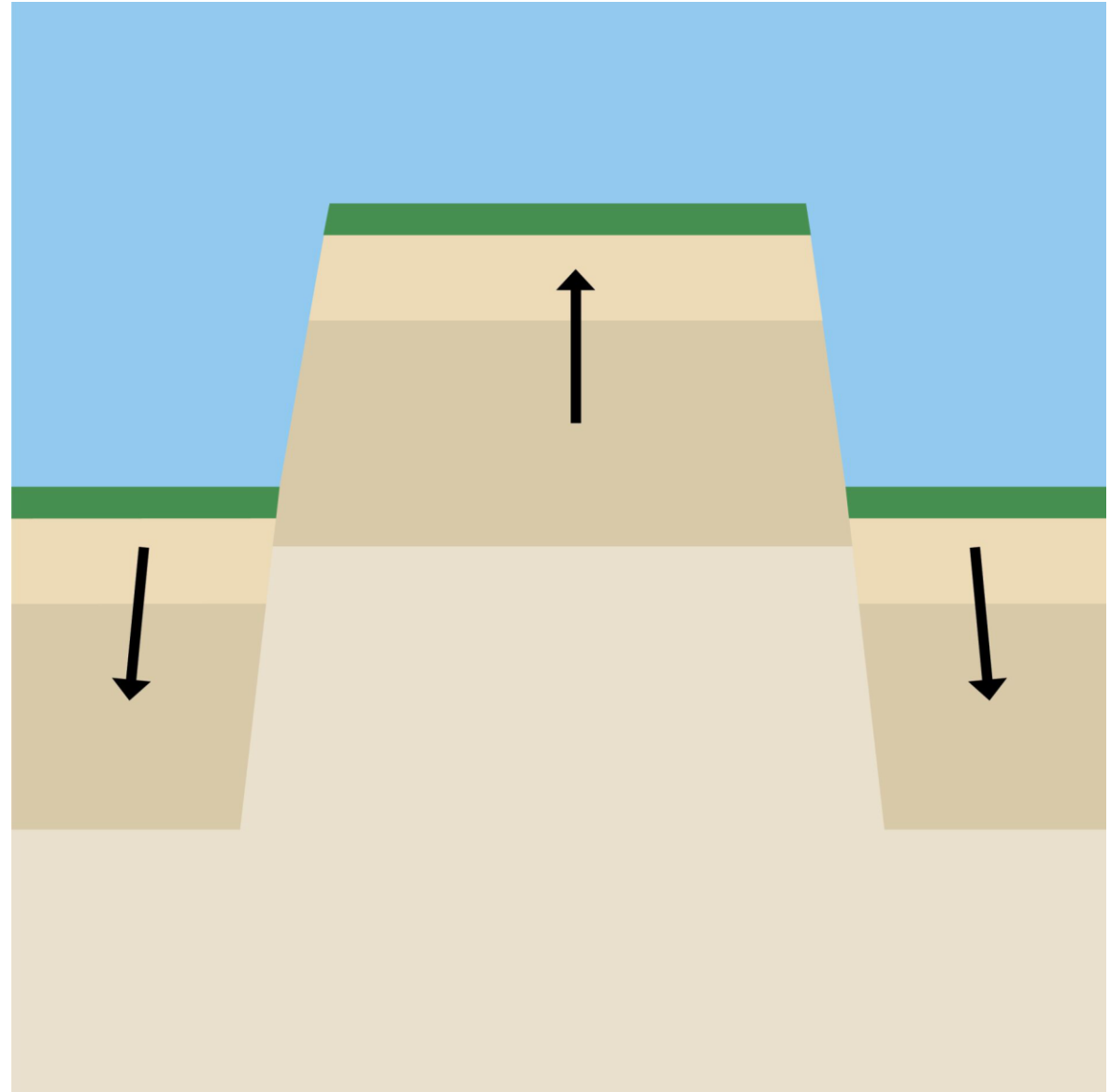
# TECTONIC PLATES

- Before we begin you need to know what tectonic plates are
- The diagram shows all the tectonic plates around the world
- As you can see one goes through New Zealand that's why they're called the 'Shaky Isles'
- This Bitesize website will tell you more about [tectonic plates](#)



# BLOCK MOUNTAINS

- Block mountains form when a land slab breaks away as two tectonic plates pull away from each other or push together





# DOME MOUNTAINS

- Dome mountains are made when molten rock swells up below the ground but it doesn't break through the surface this creates a dome like mountain like the one you see here.





# FOLD MOUNTAINS

- Fold mountains are the most common type of mountain
- They are created when the tectonic plates push forward very slowly and this creates folds
- As you can see on the picture Fold mountains can be very intricate



# VOLCANIC MOUNTAINS

- Volcanic mountains also known as Volcanoes are made when when magma or lava pushes up through the earth and it gets to the surface, hardens and forms a mountain
- Some volcanoes erupt from time to time while others are dormant (inactive)





# INTERESTING FACTS

- The scientific study of mountains is orology
- Some of the tallest mountains are found at the bottom of the sea
- Mt Everest is 8,848m high
- Mountains are home to 1/10 of the world's population
- The smallest mountain in the world is 148m tall
- Mont Blanc means White Mountain
- Mount Annapurna has caused the most recorded deaths
- The Alps is a mountain range in Europe

# TO HELP YOU UNDERSTAND...

- On the next couple of slides there are going to be some ways to make the different types of mountains
- You can try them out and hopefully making them will help you get a better understanding of how these different types of mountains are made...





# How Mountains are Made

## Fold Mountains

You will need:

- Photocopier paper
- Tissue paper
- Thicker, more scratchy material

What to do:

For each material on your table:

- Push from the outside of the materials in until they make a fold.
- How easily do they fold?
- What kinds of fold do they make?
- What difference if any does the different types of material make?
- Make a note of anything else you find interesting.

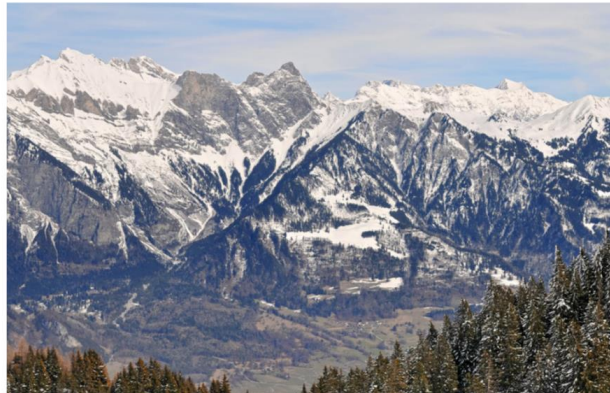


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# How Mountains are Made

## Fault-block Mountains

You will need:

- 3 triangular prisms
- 5 or 6 hardback books



What to do:

- Arrange your three triangular prisms as shown in the diagram above.
- Slowly, slide the left prism away from the others.
- What happens to the prism in the middle?
- What would happen if you tried to push the prisms back together again?
- Stand your books on the table so that they are all lined up with the spines at the top. Slowly allow the books to tilt from upright to an angle of 45°.
- What happens to the books in the middle?
- What would happen if you tried to push the books back together again?
- Make a note of anything else you find interesting.



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# How Mountains are Made

## Dome Mountains

### You will need:

- Tissues
- A variety of fabrics
- Balloons
- Balloon pumps

### What to do:

- Make a small hole in the tissue.
- Feed your balloon through the hole.
- Begin to blow up your balloon slowly.  
What happens to the tissue? What happens to the balloon?
- Layer the different fabrics over the balloon and tissue.
- Make a note of anything else you find interesting.



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# How Mountains are Made

## Volcanic Mountains

### You will need:

- Tin foil
- Red icing in piping bags

### What to do:

- **Wash your hands!**
- Put the tin foil flat across the icing bag then slowly move the bag upwards. Make a small hole in the foil and release the icing.
- Note what happens.
- Does the icing stay in one place?
- What will happen if the icing dries?
- What will happen if the icing is then pushed out again?
- What happens to the tin foil?
- What happens to the icing?
- Make a note of anything else you find interesting.

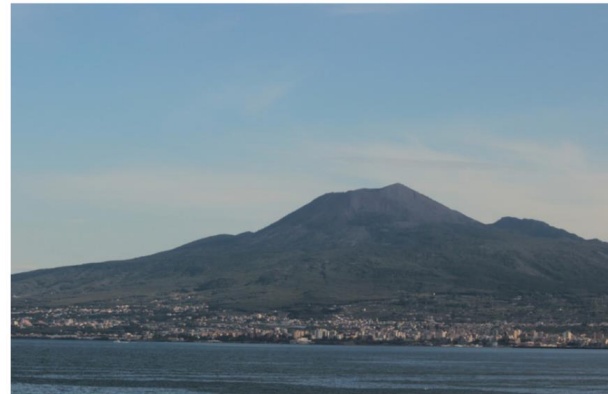


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# How Mountains are Made

## Plateau Mountains

### You will need:

- Wooden blocks (3D cubes/cuboids would do)
- Tray of sand
- Larger tray
- Jug of water

### What to do:

- Put the tray of sand inside the larger tray.
- Put your blocks so your tray of sand is slightly higher at one end than at the other. Slowly pour the water into the higher end of the sand tray.
- What happens to the sand?
- What happens to the water?
- If you carried on pouring the water what would happen?
- Make a note of anything else you find interesting.



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A scenic mountain landscape featuring a large, rugged mountain range in the background with snow-capped peaks. In the foreground, a calm lake reflects the surrounding scenery. A person is visible on a rocky outcrop on the left side of the frame. The image is overlaid with semi-transparent, wavy, colorful bands in shades of red, orange, and teal. The text "THANK YOU FOR WATCHING" is centered in the middle of the image in a large, white, sans-serif font.

# THANK YOU FOR WATCHING

Hope you enjoyed learning about mountains