

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.



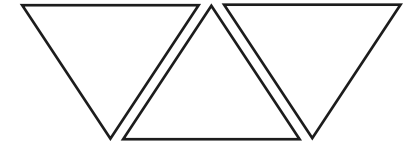
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How Mountains are Made

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:

- Tinfoil
- Red butter cream in piping bags

What to do:

- **Wash your hands!**
- Put the tinfoil 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 butter cream stay in one place?
- What will happen if the butter cream dries?
- What will happen if the butter cream is then pushed out again?
- What happens to the tinfoil?
- What happens to the butter cream?
- Make a note of anything else you find interesting.

Butter Cream Ingredients:

- 70g soft spreadable butter
- 140g icing sugar
- 1 tbsp milk
- Few drops red food colouring

Butter Cream Method:

- Beat the butter in a large bowl until soft. Add half of the icing sugar and beat until smooth.
- Add the remaining icing sugar and one tablespoon of the milk and beat the mixture until creamy and smooth. Beat in the milk, if necessary, to loosen the mixture.
- Stir in the food colouring until well combined.

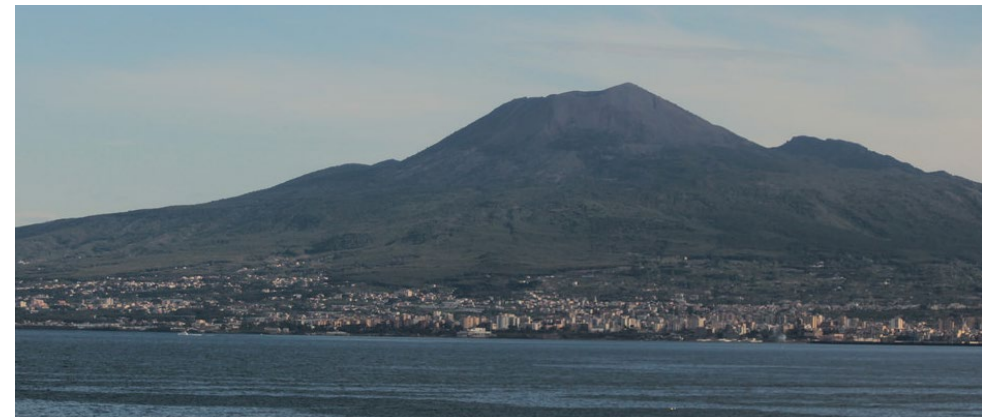


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How Mountains are Made

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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