

# 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.

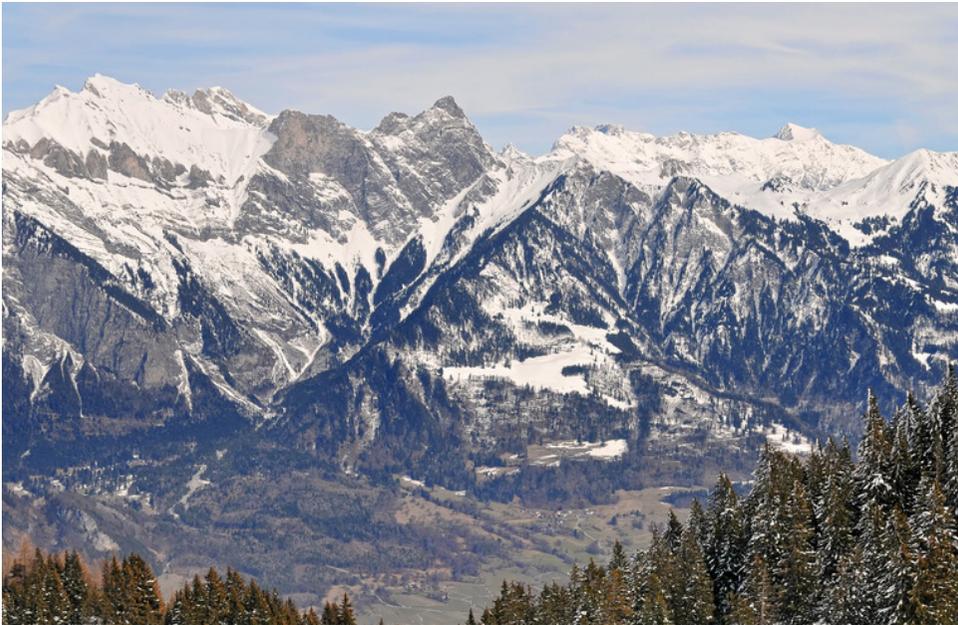


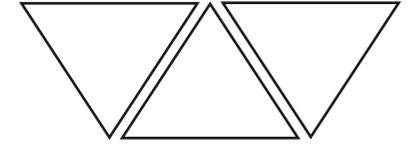
Photo courtesy of Tambako the Jaguar (@flickr.com) - granted under creative commons licence - attribution

# 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.



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

# 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.



Photo courtesy of U.S. Geological Survey (@flickr.com) - granted under creative commons licence - attribution

# 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.



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

# 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.



Photo courtesy of Nicholas\_T (@flickr.com) - granted under creative commons licence - attribution