Sandwich Geology

You will use sandwiches to model the crust and different ways they can move at fault lines.

Materials:

Your group will need:

- 4 slices of bread
- 1 paper plate
- 1 plastic knife
- Nutella
- Jam

Instructions for set-up:

- 1. Place a piece of bread on the plate.
- 2. Smear some nutella on it in a thin layer.
- 3. Place another piece of bread on top to create a sandwich.
- 4. Place another piece of bread on the plate.
- 5. Smear on some nutella.
- 6. Put the last piece of bread on top.
- 7. You should have two sandwiches.

Instructions for modelling a tectonic plate crumpling:

- 1. Slowly bend the stack up toward the center.
- 2. Push in from the edges to mimic the process of folding. Folding and faulting of a plate created the Himalayan mountain range and many other ranges in the world.

Instructions for modelling a transform boundary:

- 1. Now cut the stack in half through the middle, forming 2 blocks.
- 2. Slide them past each other flat on the paper plate to model what happens at a transform boundary.

Instructions for modelling a convergent boundary:

- 1. Cut the other sandwich into halves.
- 2. Push the two halves into each other, causing one to slip under the other.
- 3. This demonstrates a convergent fault by pushing the two blocks against each other and having one block slide downwards against the other.

Instructions for modelling a divergent boundary:

- 1. Smear some jam onto the middle of the plate.
- 2. Place the two pieces together on top of the jam blob, and slide them apart to reveal the jam underneath.



