Zedua Experiments

Title: Squishy Putty

Using some everyday household items such as borax, water, PVA glue and food colouring, make some squishy putty that you can squish in your hands, mould into shapes or even bounce on the ground.

Materials Required:

- 1. 2 containers (1 smaller and 1 big)
- 2. Water
- 3. Food colouring
- 4. PVA glue
- 5. Borax solution (ratio of about 1 Tbsp of borax to a cup of water)

Procedure:

- 1. Pour the PVA glue into the larger container.
- 2. Squirt few drops of water and stir.
- 3. Mix 2 or 3 drops of food colouring and stir.
- 4. Add a pinch of borax (possibly a bit more depending on how much PVA glue you used).
- 5. Stir the mixture and pour it into the smaller container.
- 6. By now the mixture should be joining together, and your squishy putty is ready.

What's happening?

The PVA glue you use is a type of polymer called polyvinyl acetate (PVA for short), and the borax is made of a chemical called sodium borate. When these two are combined in a water solution, the borax reacts with the glue molecules, joining them together into one giant molecule. This new compound is able to absorb large amounts of water, producing a putty like substance which you can squish in your hands or even bounce.

