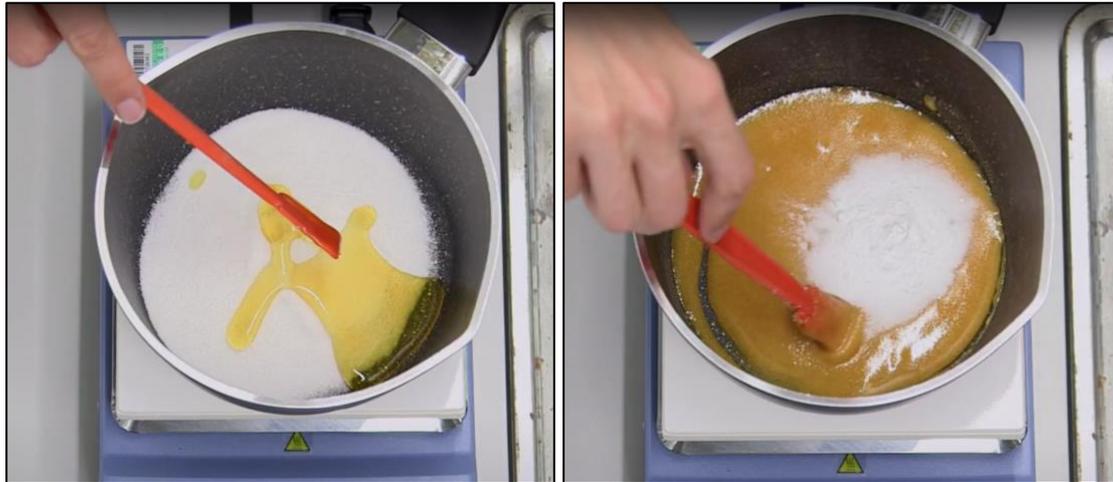


Ready, Steady, Lava!

This recipe is for Lava Toffee. You start by making liquid lava out of sugar, then add gas using bicarbonate of soda. Gas is a very important ingredient when volcanoes erupt.



Watch the lava bubble up as the gas tries to escape. Some of the gas will be trapped as the lava cools and freezes, making bubbles.

Ingredients

- 100 g caster sugar
- 1 tbsp golden syrup
- 1 tsp bicarbonate of soda
- 1 tsp water (optional)

Equipment

- Stove top
- Saucepan
- Wooden spoon
- Baking sheet
- An adult to help because it gets very hot

Instructions

1. Put the caster sugar and golden syrup into a saucepan.
2. Slowly heat up the sugar and syrup mixture while stirring occasionally until all of the crystals have melted.
3. Adding a little bit of water at this point will speed up the melting, but will also speed up the cooking of the sugar, so be careful to not let it burn. This will change the end product slightly.
4. Keep heating the melted sugar until it turns golden.
5. Take the pan off the heat and add the bicarbonate of soda.
6. Stir gently until all of the bicarbonate of soda has been mixed in.
The mixture can bubble up very quickly so be careful.
7. Pour the mixture into the baking sheet and leave to cool.

8. Once the lava toffee is completely cooled, you can eat it! Make sure to brush your teeth afterwards because it is very sticky.

Once you have made your lava toffee, have a look at the size, shape, and distribution of bubbles. Compare them to rocks that you have seen that have bubbles. You can look up pictures of pumice or bubbly basalt.



Also have a look to see whether you can see any sparkly crystals in the toffee, and compare them with pictures of lava rocks with crystals.



Can you see any bits of the lava toffee that is see-through like glass? Can you find any pictures of glassy obsidian rock?



Find out about more volcano experiments at volcanoutreach.uea.ac.uk