

MAKE YOUR OWN ROCK SUGAR!

Make beautiful, clear and colourful sugar crystals that you can eat!

YOU WILL NEED

- 1 cup of water
- 3 cups of sugar
- A tall glass or jar
- A clothes peg
- A wooden skewer
- Food colouring

WHAT YOU DO

Step 1

Clip the clothes peg onto the wooden skewer so that when you put the skewer in the tall glass it is suspended about an inch from the bottom.

Step 2

Put the peg and skewer to one side and pour the cup of water into a saucepan. Bring to the boil and gradually add the sugar, with the aim of dissolving as much of the sugar as possible in the hot water.

Step 3

Once no more sugar will dissolve, turn of the heat and allow the solution to cool for about 20 minutes.





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This experiment must be done under the **supervision of an adult** to ensure safety when using hot water.

Step 4

Pour the solution into the tall glass and suspend the skewer in the glass with the help of the clothes peg; dipping the skewer into the solution and then rolling it in some sugar beforehand can help jumpstart the crystal growth.

Step 5

Place the glass somewhere where it will not be disturbed and watch the sugar crystals grow over the following week! If you want to make coloured sugar then just add a food colouring of your choice to the solution, making sure the solution is deeply coloured before leaving to rest.

THE SCIENCE BEHIND IT

Everything is made from atoms. Atoms are like tiny little building blocks that are so small you cannot even see them with a microscope! Atoms join together to make molecules; water is made up of lots of water molecules, and sugar is made up of sugar molecules. When the sugar dissolves in water, it is breaking down into individual molecules and floating around in the water between the water molecules. So when you take the water away by evaporation, which happens slowly over a few days, the sugar molecules start to add together again and make a crystal. Some crystals take a very long time to make, like diamonds, but others can be made much faster, like your rock sugar!



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