

MAKE YOUR OWN ROCK CANDY

CAUTION: THIS EXPERIMENT REQUIRES ADULT HELP. IT DEALS WITH VERY HOT LIQUIDS

YOU WILL NEED:

- A wooden skewer (or a clean wooden chopstick)
- A wooden clothespin
- 1 cup of water
- 2-3 cups of sugar
- A tall narrow glass or jar

WHAT TO DO:

1. Clip the wooden skewer into the clothespin so that it hangs down inside the glass and is about 1 inch (2.5 cm) from the bottom of the glass. (as shown)
2. Remove the skewer and clothespin and put them aside for now.
3. Get a helpful adult!
4. Pour the water into a pan and bring it to boil.
5. Pour about 1/4 cup of sugar into the boiling water, stirring until it dissolves. What have you just made?
6. Keep adding more and more sugar, each time stirring it until it dissolves, until no more will dissolve. This will take time and patience and it will take longer for the sugar to dissolve each time. Be sure you don't give up too soon. Once no more sugar will dissolve, remove it from heat and allow it to cool for at least 20 minutes.
7. NOTE: While it is cooling, some people like to dip half of the skewer in the sugar solution and then roll it in some sugar to help jump start the crystal growth. If you do this, be sure to let the skewer cool completely so that sugar crystals do not fall off when you place it back in the glass.
8. Have your friendly ADULT carefully pour the sugar solution into the jar almost to the top. Then submerge the skewer back into the glass making sure that it is hanging straight down the middle without touching the sides.
9. Allow the jar to fully cool and put it some place where it will not be disturbed.
10. Now just wait. What do you think will happen? Why? How long will it take do you think?



Want colored rock candy? Add food coloring to your sugar water and make sure that it is pretty dark in color for the best result.

HOW DOES IT WORK?

When you mixed the water and sugar, you made a SUPER SATURATED SOLUTION. This means that the water could only hold the sugar if both were very hot. As the mixture cools the sugar "comes out" of the solution back into sugar crystals on your skewer. The skewer (and sometimes the glass itself) acts as a "seed" that the sugar crystals start to grow on. With some luck and patience, you will have a tasty scientific treat in 3 to 7 days! Enjoy!



Adapted from www.sciencebob.com

<http://www.sciencebob.com/experiments/rockcandy.php>

