

MASON JAR SCIENCE



DIY ROCK CANDY



This is absolutely sweet science! Grow sugar crystals and make homemade rock candy with this simple chemistry experiment. Are your kids always in the kitchen looking for a snack? How about next time they are looking for a sweet treat, you add some fun learning to their snack request! Growing sugar crystals is a fun and easy science experiment for kids.

SUPPLIES

1 cup water
4 cups sugar
Mason jars
String
Edible glitter
Food coloring
Straws

- STEP 1:** The day before starting your sugar crystal experiment, cut a piece of string a little longer than your jars. Tie one end of the string to a straw. Tie a knot in the other end.
- STEP 2:** The following day add four cups of sugar and one cup of water to a saucepan and heat until boiling. This will form your supersaturated solution.
- STEP 3:** Pour your sugar mixture into the jars. Add edible food coloring to each jar and add some edible glitter.
- STEP 4:** Lower the string into the jar and place the jars in a safe place. Let the sugar crystals form for at least a week.
- STEP 5:** Once the sugar crystals are as big as you want them, remove them from the sugar solution. Lay them on a towel or plate and let them dry for several hours.

THE SCIENCE

Sugar crystals are formed as a result of a supersaturated solution. A supersaturated solution contains more sugar than could be dissolved in water under normal conditions.

In a saturated solution, the sugar molecules have a higher chance of bumping into one another because there is less space to move around. When this happens, the sugar molecules start sticking together.

When you give the sugar molecules something to cling too (in this case the string), they form into crystals faster. The more molecules bump into each other, the bigger the sugar crystals get. The bigger the crystals are, the more they pull other sugar molecules toward them, making even bigger crystals.

Molecules bind together following orderly and repetitive patterns, so eventually, you're left with visible sugar crystal patterns in your jar.

