

BOOMbox at Home

Rock Candy

Make a tasty treat to enjoy while learning about how sedimentary rocks are formed.

Supplies

- a cup or a jar
- ½ cup water
- 1½ cups sugar
- a skewer or chopstick
- clothes pegs or clips
- fruit syrup (optional)
- gel food dye (optional)

Instructions

- Mix the sugar and water together. At this stage, the sugar will only partially dissolve.
- Ask an adult to help you heat up the sugar and water mixture until it is boiling.
- Once the sugar water mixture is boiling, carefully stir it until all the sugar is dissolved to make a supersaturated sugar solution. You can tell that all the sugar is dissolved when the mixture stops being cloudy and becomes clear.
- If you'd like, add fruit syrup or food dye to the sugar solution to give the rock candy a fun color and flavor.
- Let the sugar solution cool down for ten minutes.
- While the sugar solution is cooling, dip the stick into the sugar solution, and roll it in more sugar so that there is a layer of sugar stuck to the stick.
- Place two clothes pegs onto the middle of the stick to keep the stick from touching the bottom of the container.
- Pour the sugar solution into the container and place your sugar covered stick into the container.
- Over the next seven days, watch the rock candy grow. When the rock candy is big enough, take it out, and enjoy the tasty treat that you grew at home!





You can use clips or pegs to suspend the stick so that it does not touch the bottom of the container. This will give the sugar crystals room to grow.



Several days later, you will be able to watch the sugar crystals growing onto the stick. They will continue growing each day until they are ready to eat.

Want to explore more?

Here is how rock candy works:

- By dissolving lots of sugar into a little bit of water, you are creating a supersaturated solution. This means that the sugar does not want to stay dissolved.
- The rough surface of the string or the sugar-coated stick creates nucleation sites, which means that it gives the sugar a surface to hold on to. The sugar precipitates, which means that it is leaving the liquid solution and turning into a solid.
- Sedimentary rocks are created when the tiny bits of minerals that are dissolved in water are left behind in one place. Examples of sedimentary rocks can be found on salt plains and cave stalactites.
- Can you see the similarities between the rock candy you made and the real life rocks around you?

What will you learn today?