

Families on-the-go

Candy Crystals

Try and make your own candy crystals.

You can find crystals almost everywhere you go. Next time you're at the beach, take a very close look at some sand—you'll find it's made of tiny crystals! Crystals are what make up stalactites and stalagmites in caves, precious gems, and even ice! You can even eat some crystals...

Materials:

- 1/2 cup (125 mL) hot tap water
- 2 cups (500 mL) granulated sugar
- Mixing bowl
- 6 inch length of string
- Paper clip
- Pencil
- Glass jar
- Magnifying glass

Directions:

Step 1: In a mixing bowl, combine the hot tap water and 1 cup of granulated sugar. Mix until the sugar dissolves.

Step 2: Add the remaining sugar and stir until it, too, dissolves.

Step 3: Tie a paperclip to one end of the string. Tie the other end around a pencil.

Step 4: Rest the pencil across the mouth of jar. The string and paper clip attached should hang inside the jar.

Step 5: Pour some hot sugar solution into the jar.

Step 6: Sit the jar in a cool and dark place for at least 2 days. You should begin to see the sugar begin to return back to the solid crystal form.

Step 7: Take few minutes to explain the science behind the experiment to your parents!

Explanation:

If you take a look at some sugar through your magnifying glass, you will see that it is made up of tiny little crystals. In this activity, you dissolved these tiny crystals in a liquid and then let the crystals grow back larger, and in one big mass—rock candy! The sugar crystals that make up your rock candy might look a little different than what you started with, but those tiny sugar crystals and your rock candy share the same crystal form, and are the same thing! Chemically speaking, we call this a **physical change**. You ended up with something that looks a little different than what you started with, but it's just as delicious (and still the same thing) as the original!

For Added Fun:

Try doing the experiment again using salt or baking soda! Warning: It sure won't taste as good!

Mad Science aims to spark the imagination and curiosity of children by providing them with fun, entertaining and educational activities that instill a clear understanding of what science is really about and how it affects the world around them. For more information call (727) 895-5595 or (813) 655-6643 or visit our website at www.MadScience.org/wsTampaBay