

ACTIVITY!

ROCKY TREATS

SUPPLIES



- > small pot
- > 1 cup water
- > 1½ cups sugar to start, then about another ½ cup sugar for third step
- > wooden spoon
- > mason jar or other glass container that can hold hot water
- > pencil
- > clean cotton string

With this project, you can see how molecules that are separated can come back together—and then you get to eat the results! **CAUTION: An adult needs to help with the boiling water.**

1 Fill the pot with water and have an adult heat it and remove it from the stove once it's boiling.

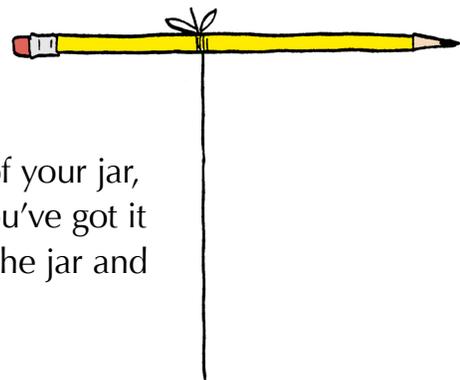
2 With your adult helper, add the sugar to the water and stir it until it's completely dissolved. Be careful. It's still going to be very hot! When all the sugar is completely dissolved you shouldn't see any more sugar crystals anywhere.

3 Start adding more sugar, just a little at a time. Keep stirring! You should notice that it takes longer for the sugar to dissolve each time you add more. Stop adding sugar once you can see sugar floating in the water. It should be about another ½ cup from the original amount, but keep watching and adjust to what you observe.



4 Let the sugar water cool for about 10 minutes.

5 While the sugar water is cooling, tie one end of the string around your pencil. Lay the pencil across your jar and cut the string to a length that will let the string reach the bottom of your jar, but not get all piled up on the bottom. Once you've got it to a good length, take the pencil and string off the jar and set it aside for now.



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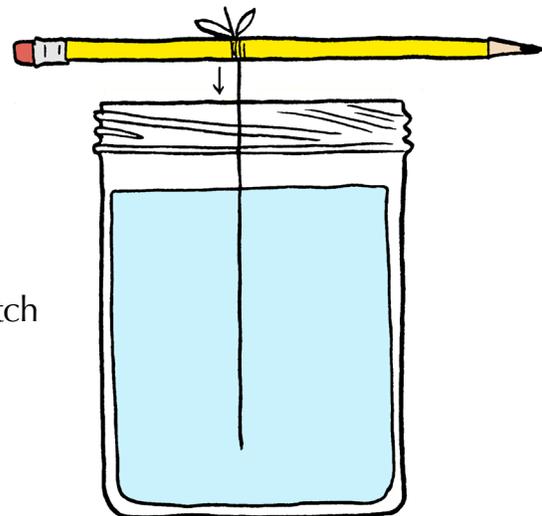
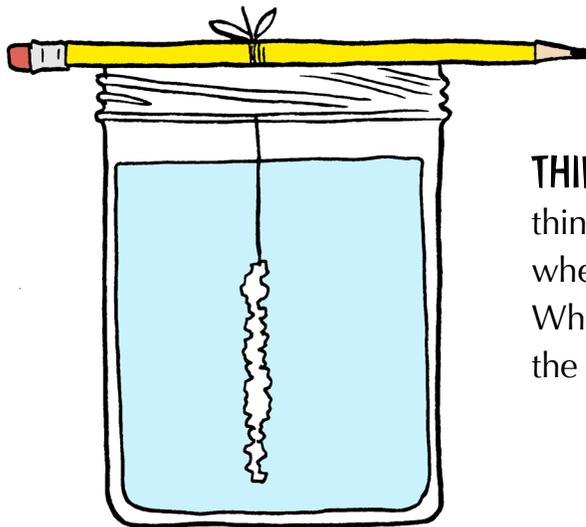
6 When your water is cooled, pour it into your jar.

7 Take a little sugar and rub it into your dry string. This will give your rock candy crystals something to grab onto.

8 Lay the pencil back over the glass so the string hangs down into the water. You can poke the string down a little if it tries to float. You want it hanging down into the glass.

9 Now comes the hard part: Put your jar in a place where it won't get bumped, and wait!

10 It takes a few days for all the rock candy to form, but every day you can watch as more crystals collect on the string. It's worth the wait!



DID YOU KNOW?

You have the same mass on Earth as you do on Mars. But because Mars is less dense, it has less gravity to pull on you. If you weighed 100 pounds (45 kilograms) on Earth, you'd weigh about 38 pounds (17 kilograms) on Mars. That's about as much as a small dog back on Earth!

THINGS TO THINK ABOUT: What do you think happened to the sugar molecules when they dissolved in the hot water? What did those same molecules do as the water cooled?