

## **Growing crystals – sugar (Adult help necessary!)**

### **Materials:**

- 1/2 cup water
- 1 cup table sugar (sucrose. Note: we were out of regular granulated sugar and ended up using a baker's sugar which is superfine sugar)
- clean glass jar
- pencil
- rough string (cooking twine works great)
- pan or bowl for boiling water and making solution
- spoon
- stove

**Time needed:** Prep time ~ 20 minutes

Crystal growing time ~ A few days to a week.

Caution: Adult needed to use a stove & pour the hot sugar solution into the jar.

### **Method:**

**Step 1.** Tie a length of cooking twine onto a pencil that will be long enough to reach almost the bottom of your glass jar.

**Step 2.** Make a saturated sugar solution by boiling the water in the pan, slowly adding sugar a teaspoon at a time. Stir after each spoonful and keep adding sugar until the sugar won't dissolve any more in the water. If you don't add enough sugar, your crystals will not grow quickly. If you use too much sugar, your crystals will grow on the undissolved crystals and not on the string.

**Step 3.** Pour your solution into the clear glass jar. If you have undissolved sugar at the bottom of your container, avoid getting it in the jar.

**Step 4.** Drape your string inside the glass jar.

Tip: Weighted your string with something heavy (and preferably edible), like a lifesaver. You don't want the string touching the sides or bottom of the jar and you do want it covered in the sugar solution.

You may have to break through a crystal layer to get to your string if you have a lot of sugar (a super saturated solution).

**Step 5.** Set the jar aside and check on your string each day and observe the crystal growth. You can cover it with a coffee filter or paper towel to keep dust off of the jar.

**Step 6.** Allow the crystals grow until they have reached size you desire or have stopped growing. You can pull the string out and allow the crystals to dry. You can eat them or keep them.