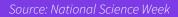


# **Rock Candy**



# DIY Science



## WHAT YOU NEED

Ingredients 2 ½ cups (plus an extra 2 pinches) white sugar Food colouring

#### Equipment

Saucepan Stove Large spoon Measuring cup 2 bamboo skewers

2 tall glasses or jars (250 ml capacity) 2 clothes pegs Aluminium foil



#### SAFETY

Hot sugar syrup can cause nasty burns. Prepare it for children and be careful when stirring it.

### **METHOD**

- 1. Add 1 cup of cold tap water and 1 cup of white sugar and stir over a medium heat until the sugar has dis-solved. Do not allow the syrup to boil.
- 2. Gradually add the remaining 1½ cups of white sugar to the saucepan, about ½ a cup at a time, and stir until all of the sugar has dissolved.
- 3. Add a few drops of food colouring and stir.
- 4. Leave the sugar syrup to cool for at least 1 hour.
- 5. Meanwhile, place a spoonful of the warm sugar syrup on a small plate and allow it to cool slightly. Coat one end of each of the bamboo skewers with sugar syrup to cover about one third of the skewer, then cover the syrup with a pinch of white sugar.
- 6. Arrange the bamboo skewer, foil and pegs as pictured so the coated end of the skewer sits in the middle of the tall glass without touching the bottom.

 Fold the foil back and fill the tall glasses with cooled sugar syrup and leave undisturbed for 3-6 days while the rock candy grows on the skewers. When finished, leave the rock candy skewers out of the syrup to dry.

# WHAT'S HAPPENING?

Rock candy is a crystal; a regular and repeating arrangement of sucrose molecules. The sugar syrup is a super saturated solution of sucrose, meaning that there is more sucrose in solution than would normally be dissolved in water at room temperature. The pinch of sugar on each bamboo skewer provides 'seed crystals', starting points for the sucrose molecules in the sugar syrup to move out of solution and form large crystals.