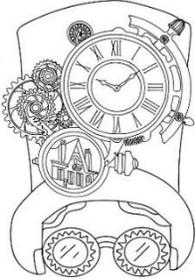


Victorian Time Traveler Kit

Science Activity: A Sweet & Structured Treat



In this activity, we will experiment with growing rock candy and learn about the microscope, a scientific instrument developed in the Victorian Era. Adult supervision required.

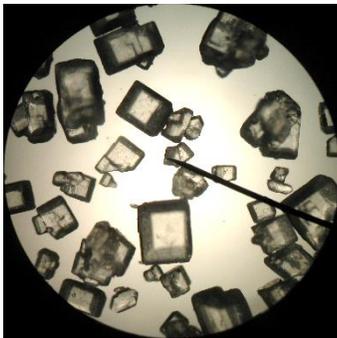
Supplies Needed: glass jar, lollipop stick, clothespin, sugar, water, whisk or spoon, food coloring (optional), and video demonstration.

Time: Prep – 20 minutes. Rock candy takes approximately 7 days to form.

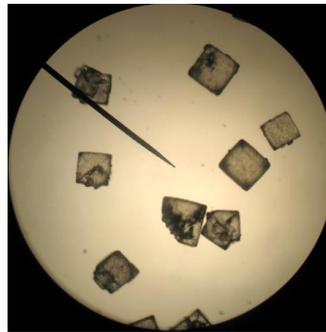
ROCK CANDY, a delicious treat made from sugar and water, has been enjoyed since Victorian times by children and adults alike. In this period of history, children ate a lot less candy than we do now. Candy and other sweets were not available in all of the varieties back then, and the candy that could be found was very simple and often homemade. Gilmer and Doré probably enjoyed homemade candy when they lived at Körner's Folly during the 1800s and early 1900s.

We can make our own Victorian Rock Candy, using just sugar and water. Although it takes about a week for the candy to form, watching the sugar crystals grow is incredible! Rock Candy is formed by creating a super-saturated solution of lots of sugar dissolved in a little water. Once the water evaporates, the sugar is reorganized into a crystalline structure, formed from the sugar molecules sticking together in their natural shape. *Watch the video demonstration included with download link for instructions on how to make Rock Candy.*

Visible under a microscope, the crystal structure of sugar resembles a rounded cube (on left). These crystals are what will grow in your glass jar. Compare them to salt crystals (on right), which are more jagged.



Sugar crystals under a microscope



Salt crystals under a microscope

The microscope was one of the most important tools of the Victorian period, allowing scientists and researchers to see things that were very small for the first time, which helped them learn much more about the natural world. Although it was originally invented by Galileo in 1624, the modern microscope was developed in the 1800s and included a specimen stage to hold a glass slide, an ocular lens to magnify the image, objective lenses to change focus, and a light source, to illuminate the specimen in detail.

The microscope illustration below can be used as a coloring page for younger students.

