

Sugar Crystal Challenge

Student Activity: Crystal Challenge

◆ Evaluation Phase

Complete the following questions as a group:

1. Compare the crystals that grew from the granulated sugar and those that grew from the confectioner's sugar? Be sure to be specific and include illustrations if that helps you.
2. How did your hypothesis about the crystals compare to the actual results? Were you surprised by what you found?
3. List two uses of sugar where the sugar with the greater surface area that would have been a better choice than a courser sugar. Why do you think this is true?
4. Suggest another use for the principle of nanotechnology. For example, engineers are testing the use of nanostructures to increase the surface area of solar panels to make them more efficient because there is greater opportunity for the sun to reach a surface. Can you think of a similar idea?
5. What is the most interesting aspect of nanotechnology or nanostructures you learned during this lesson?