

# Crystal Growing Activity

## Questions

1. What would have happened if you had put your seed crystal in a saturated growing solution instead of a supersaturated growing solution?
2. Why is it important that your crystal remain at a constant temperature while it is growing?
3. If you came back to school on a Monday and your crystal was dissolved, what might have happened over the weekend?
4. If you let a crystal grow on the bottom of a jar and let another crystal grow from a seed crystal hanging by a string, how would the shapes of the two final crystals differ?
5. If a crystal is cloudy, what may be the cause of the cloudiness?
6. What is the habit for your crystal? Sketch the unit cell for your crystal. (If there are several variations to the unit cell for your crystal, draw the simplest one.)
7. Does your crystal's habit reflect the shape of its unit cell? If not, why might the actual crystal be a different shape than its unit cell?
8. If you were to break your crystal in half by hitting it with a hammer, what do you think the two broken pieces would look like? *Hint:* Would the crystal break parallel to one of the faces?
9. Imagine you have a friend who wants to grow sugar crystals to make rock candy. Briefly outline the instructions you would give your friend for growing sugar crystals. (Don't worry about the specific number of grams of sugar—just outline the basic procedure.)