

## 205 Dissolving



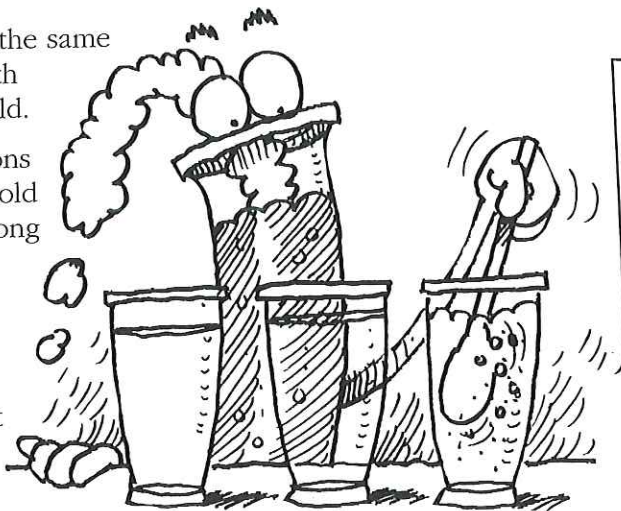
### Materials

- salt
- 3 glasses
- water
- spoon

Test how to dissolve a solid in water faster.

### STEPS

1. Fill the three glasses with the same amount of water, but two with warm water and one with cold.
2. Place two heaped teaspoons of salt into the first glass of cold water. Stir it, and time how long it takes to dissolve.
3. Place two heaped teaspoons of salt into the second glass of warm water – don't stir! Time how long it takes to dissolve.
4. Place two heaped teaspoons of salt into the third glass of warm water. Stir it, and time how long it takes to dissolve. What did you notice?



### Did You Know?

Stirring and warm water both help to dissolve a solid into water faster. Doing both at the same time should have been the fastest way to dissolve the salt.



## 206 How Sweet



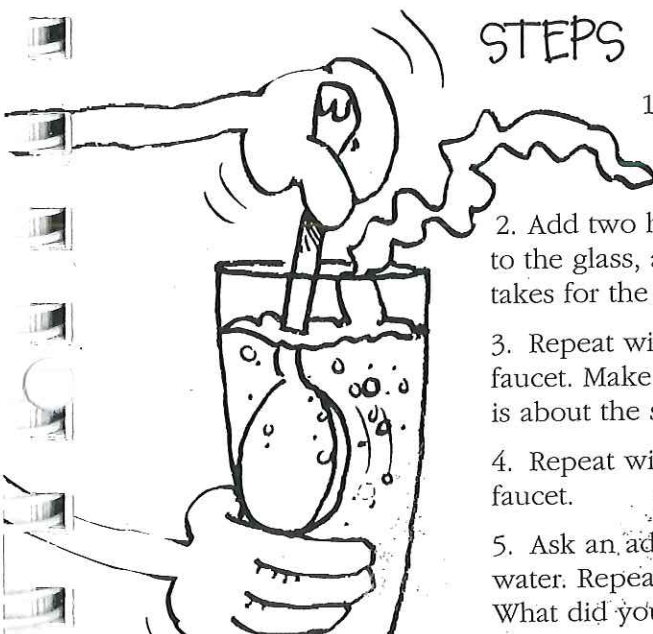
### Materials

- sugar
- 4 glasses
- cold water, faucet water, warm water, hot water
- spoon

Test how water temperature affects the dissolving of sugar.

### STEPS

1. Fill one glass with water and place in the refrigerator for an hour.
2. Add two heaped teaspoons of sugar to the glass, and stir. Count how long it takes for the sugar to dissolve.
3. Repeat with cold water from the faucet. Make sure the amount of water is about the same!
4. Repeat with warm water from the faucet.
5. Ask an adult to help you boil some water. Repeat the dissolving process. What did you find out?



### Did You Know?

The warmer the water, the faster the particles are moving around. This means the faster the water and sugar particles will mix together, so the boiling water should have dissolved the sugar fastest. The cooled water should have dissolved the sugar the slowest because the particles will be moving around much more slowly.