

Student activity sheet

Activity 4.5

Temperature affects the solubility of gases

Does temperature have an effect on how quickly dissolved gas escapes from a soda?

When gas bubbles rise to the surface of a liquid and pop, the gas goes into the air above the liquid. So, watching bubbles rise to the surface and pop can give you a sense of how much gas is becoming “un-dissolved” or is leaving the solution. In this activity, you will compare the amount of gas that leaves warm and cold carbonated water by observing the number of bubbles that rise from each.

Plan your experiment

1. Use drawings and captions to describe your experimental design.

Conduct your experiment

What do you observe?

2. Go back to the drawing you made when planning your experiment. Add to your drawing and use captions to describe your observations.

3. Does gas escape faster from warm or cold carbonated water? _____
How do you know?

4. Why do you think people store soda pop in the refrigerator?
