

Curiosity Labs™ by Merck:
Bobbing Raisins

in this experiment, you will learn...

- About **buoyancy**
- What **density** is
- How the density of an object can be changed by increasing or decreasing its buoyancy

Share your results and tag us! #SPARKCuriosity

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SUPPLIES

- Clear glass jar
- Carbonated drink (clear)
- Handful (4 - 6) of raisins

Instructions

STEP 1

Pour the carbonated drink into the glass jar.

STEP 2

Drop the raisins into the glass jar.

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FUN FACTS

An important part of this experiment is the wrinkles on the raisins. The bubbles can attach to the raisins because of the crevices that the wrinkles create. As the bubbles settle into the crevices, they give the raisins more buoyancy.



WHAT HAPPENED?

The raisins begin to dance and bob up and down. The bobbing up and down happens because the bubbles of the carbon dioxide gas in the drink are much less dense than the drink and the raisins.

Raisins are denser than the carbonated drink, so they will sink when you first drop them in. When the raisins are covered with the bubbles, they become less dense than the drink, so they start to rise. The bubbles act as a flotation device for the raisins. As the bubbles rise, they start to burst and the raisins become denser than the drink again and sink.