

DANCING RAISINS



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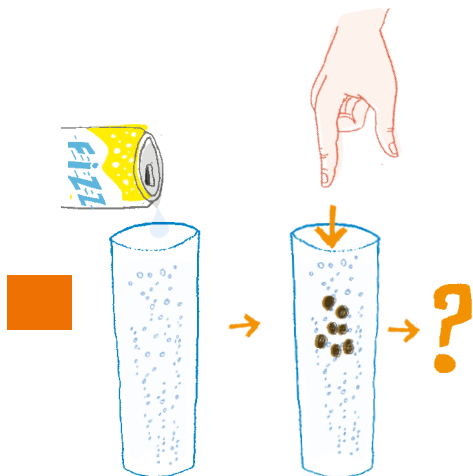
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The brief

Make raisins dance up and down in a glass of soda.

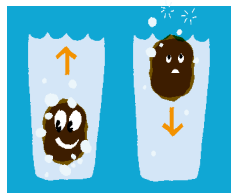
The method

1. Pour the can of soda into the tall glass.
2. Notice the bubbles coming up from the bottom of the glass. The bubbles are carbon dioxide gas released from the liquid.
3. Drop a few raisins into the glass. Watch the raisins for a few seconds. Describe what is happening to the raisins.
4. Do they sink or float? Keep watching, what happens?



Materials

- A can of clear soda (e.g. lemon-lime)
- A tall, clear glass
- A handful of raisins



How does it work?

Raisins have a higher density than the liquid in the glass, so they sink to the bottom. Carbon dioxide bubbles attach themselves to the raisins increasing their volume while adding very little to their mass. With greater volume, the raisin displaces more fluid. This causes the water to exert greater buoyant force, pushing the raisins upwards. Once the raisins reach the top of the glass the carbon dioxide escapes and the raisins sink again.