



MOVING OR DANCING GRAPES

Make grapes dance with science!



1. PREDICTION

What do you think will happen when we put grapes in sparkling water?



2. DRAW YOUR EXPERIMENT

Draw what happens in each step.

1



2



3



4



3. OBSERVATIONS

What did you see? What happened?



4. WHAT DID I LEARN?

What did you learn from this experiment?



5. CHALLENGE QUESTION

What would happen if you used juice instead of sparkling water? Why?

MATERIALS



Sparkling water (seltzer)



1 clear glass



Some grapes

DIRECTIONS

- 1 Fill the glass 3/4 full with sparkling water.
- 2 Add the grapes to the glass.
- 3 Watch the grapes sink to the bottom.
- 4 Watch the grapes rise to the top as bubbles attach to them.
- 5 When the bubbles pop, the grapes sink again. The "dance" will continue as long as there are bubbles in the water!



WHY IS THIS HAPPENING?

This process is called buoyancy. Grapes are denser than water, so they sink. However, carbon dioxide bubbles in the sparkling water attach to the grapes, making them less dense so they float. When the bubbles pop, the grapes sink again, and the cycle repeats.

The grape sinks.



Bubbles attach to the grape.



The grape rises.



Bubbles pop at the top.



The grape sinks again.



EXTRA QUESTION

What would happen if we used warmer water?
What if we used more or fewer grapes?

NOTE

You can substitute grapes with raisins, dates, or corn kernels for similar results.

