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Project ID.

Project Title :DANCING RAISINS

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INTRODUCTION

demonstrates the principles of density and buoyancy using simple household ingredients like raisins and a carbonated liquid, such as clear soda or a mixture of water, baking soda, and vinegar.

AIM

To investigate why raisins “dance” (move up and down) in a fizzy drink.

Hypothesis (an example)

If raisins are placed in a fizzy drink, then they will move up and down because gas bubbles attach to them and lift them to the surface.

Materials

1 clear glass or transparent plastic cup

6–8 raisins (similar size)

A bottle or can of clear carbonated drink (e.g., Sprite, 7UP) — chilled or room temp both OK

A notebook and pencil for observations

(Optional) 1 cup of plain still water for comparison

Timer or clock



Procedure (step-by-step)

1. Put the cup on a flat table and pour in about 3/4 cup of the carbonated drink.
2. Drop 6–8 raisins into the drink. Ask the students to observe quietly for the first minute.

3. Start the timer and watch for 5–10 minutes. Record what happens every minute (do raisins sink, rise, stay floating?).

4. (Optional comparison) In a second cup, pour the same amount of still water and drop the same number of raisins. Observe side-by-side.

5. Ask students to draw what they see and write short notes: time when raisins first rose, how many rose, etc.

Variables

Independent variable (what you change): Type of liquid (carbonated drink vs still water).

You can also test concentration by using different sodas or letting soda go flat for comparison.

Dependent variable (what you measure): How often the raisins rise to the surface or how long they stay floating. You can count the number of rises in 5 minutes or record whether they float/sink.

Controlled variables (keep the same): number and size of raisins, same cup, same amount of liquid, same temperature, same starting time.

Data recording (simple table to copy into notebook)

Minute	Number of raisins floating (in soda)	Notes (movement, bubbles seen)
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0

1

2

3

4

5

(And a similar short table for the still water cup.)

In the carbonated drink you should see bubbles forming on the raisins. After a short time some raisins will rise to the surface, then lose their bubbles and sink again — this makes them look like they are “dancing.”

In plain water the raisins will mostly sink and stay at the bottom (no dancing).

Explanation / Scientific Reason (simple)

The fizzy drink contains tiny gas bubbles called carbon dioxide (CO₂). Bubbles stick to the rough surface of the raisins. When enough bubbles attach, they make the raisin lighter so it floats to the top. At the surface the bubbles pop and the gas escapes, making the raisin heavier again, so it sinks. This cycle repeats — the raisins appear to dance!

Conclusion (example)

The experiment supports the hypothesis: raisins in a carbonated drink rise and fall because carbon dioxide bubbles attach and lift them, then pop at the surface causing them to sink again. Raisins in still water do not dance because there are no gas bubbles to lift them.
