

The Dancing Raisins

Grade level: Two

Strand: Understanding Matter and Energy

Topic: Matter, Matter, Everywhere - Properties of Liquids and Solids

Overall Expectations:

Demonstrate an understanding of the properties of familiar liquids (e.g. pop) and solids (e.g., raisins), and of interactions between liquids (e.g., pop) and solids (raisins).

Specific Expectations:

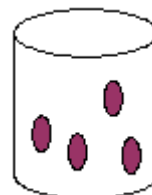
1. Understanding Basic Concepts
 - o Describe the properties of liquids and solids, using observations
2. Developing Skills of Inquiry, Design and Communication
 - o Ask questions about and identify needs and problems related to the use of liquids and solids, and explore possible answers and solutions (e.g., predict what will occur when raisins are added to 7-Up)

Required materials:

1. 7-Up
2. A clear plastic cup or 600mL beaker for the 7-Up
3. Raisins

Procedure:

1. Show students the materials to be used in the experiment and state the problem.
2. Ask students to hypothesize the outcome of this experiment.
Have students explain their reasons for their predictions.
3. Conduct the experiment.
 - a. (Optional: Shake unopened can of 7-Up, then carefully) Open can of 7-Up.
 - b. Pour 7-Up in clear plastic cup or beaker.
 - c. Add a handful of raisins.
 - d. Observe the results. (Enjoy the performance!)
 - e. Discuss results as explained in the objective.



Scientific Principle:

Raisins are more dense than water so they sink. The 7-Up contains bubbles of carbon dioxide which are less dense than water. The bubbles collect on the raisins causing them to float. When they reach the surface, the bubbles pop and the raisins sink to the bottom again. More bubbles form and they “dance” again! (Use regular 7-Up not the diet type). The experiment works more quickly if one shakes the can first. Be careful when you open the can!

Resource: Evan-Moor Corp., Science Experiments/Volume 1, Monterey, California, 1991.