SEWER MAGGOTS

Materials needed:

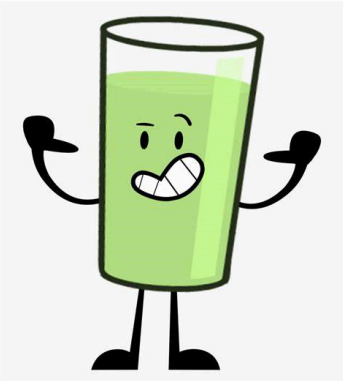
- Clear beaker or glass
- Mountain Dew
- Raisins

Procedure:

1. Observe the raisins. Make note of physical properties and any unusual characteristics.
2. Fill the beaker/glass about 75% full with Mt. Dew.
3. Drop 12-15 raisins into the beaker. Wait a few seconds.
4. Observe what happens to the raisins.

Discuss these questions:

1. What happens to the raisins after a few seconds?
2. Why do you think this happens?
3. What happens to the raisins after they rise for a few seconds?
4. Why do you think this happens?





EXPLANATION

This is an observation and density lab/demonstration. The raisins sink because they are denser than the Mt. Dew. After a few seconds, bubbles collect in the crevices and wrinkles of the raisins. These bubbles cause the overall density of the raisins to become lower than the density of the Mt. Dew and they rise to the surface. After a few seconds, the bubbles on the top side of the raisin burst, causing to top side to become denser than the bottom side. This causes the raisin to spin. When the bubbles on the new top side burst, the raisin sinks to bottom where it collects more bubbles and it rises again. This cycle continues until the raisins become saturated with Mt. Dew or the Mt. Dew loses its carbonation.

TEACHER SUGGESTIONS

Have student list factors they could change to see if the results remain the same. While still using Mt. Dew, maybe try golden raisins, yogurt-covered raisins, prunes, or grapes. While still using regular raisins, maybe try using different brands of soda, caffeine free sodas, diet sodas, or other liquids.

Invariably, some students will think, “I love Mt. Dew. I like raisins. Raisins soaked in Mt. Dew must be awesome!” I always used beakers so I could tell the students I wasn’t sure how clean they were.