

Create with Christa

Grades K-2

Candy Heart Science

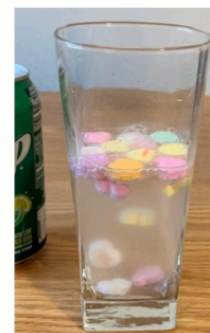
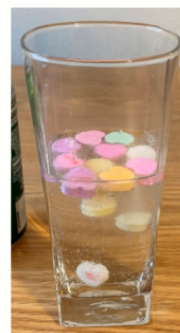
Thursday, February 13

3:15PM - 4:00PM



Grades K-2

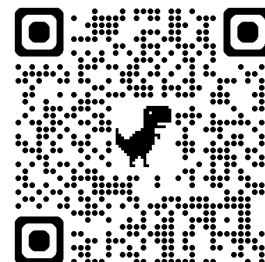
Come explore chemistry this Valentine's Day.
We will see if Candy Hearts float, sink,
dissolve or dance!



Scan QR Code to register or register online at our website at bedfordfreelibrary.org



32 Village Green
Bedford, NY
bedfordfreelibrary.org
914-234-3570



Will the candy hearts sink or float? or dissolve

What Is Solubility?

Solubility is how well something dissolves in a solvent. The substance you try to dissolve may be a solid, liquid, or gas, and the solvent may also be a solid, liquid, or gas.

Notice how the candy heart in the oil says “NO WAY!”—fitting, since the candy won’t dissolve in oil. Why? Oil molecules are very different from water molecules. Unlike water, oil molecules do not attract the sugary solid, so the heart stays intact. Oil is a non-polar substance, meaning it doesn’t mix with polar substances like sugar.

Now, take a look at the test tube with water. Water is known as the universal solvent because it can dissolve a wide range of substances, including salts, sugars, acids, gases, and many organic compounds. In this case, the water molecules break down the sugar in the candy heart, causing it to dissolve.

Dancing hearts

What happens when you put candy hearts in soda?

After a couple of minutes, some (or all) of the candies should have slowly begun to rise up through the soda. The carbon dioxide bubbles in the soda were sticking to the candies, and when enough lighter-than-soda bubbles accumulated on a given candy, they should have lifted it up through the soda.

In the final setup, you’ll see vinegar and almond milk. Vinegar, an acidic liquid, also dissolves the candy because it contains water. As for almond milk, while it’s primarily made up of water, it may take longer to dissolve the candy, depending on its specific composition.

Do candy hearts float in vinegar?

It is a denser liquid than water, so the heart is likely to float quicker as some of it dissolves. Our heart in the distilled vinegar dissolved all the way over the course of time