What Dissolves Jelly Beans the Quickest? Experiment - 3

Materials Needed:
Jelly Beans
4 Clear glasses or containers
Hot water
Vinegar
Salt Water (1 Tbsp. salt added to 1 cup water)
Oil
Labels
Paper towels
What Dissolves Jelly Beans the Quickest? recording page (page 56)

This is an extension activity of the previous experiment where students learned that hot water dissolved jelly beans best when only comparing water. Now they test whether hot water will still dissolve the jelly beans the quickest compared to other liquids (the additional 3 liquids used can be adjusted to what you have on hand or what students wish to test).

Prior to beginning the experiment, explain to students that you are going to test which liquid will dissolve jelly beans the quickest. Show them the liquids and have them predict which liquid they think will work best and record it on their recording pages.
Fill each glass or container with equal amounts of the 4 liquids. Label each container.

Drop the same number of jelly beans in each container at the same time.

Observe the jelly beans. You should see a difference in the hot water pretty quickly. You can set a timer and observe for a certain period of time or make some observations and then come back to the experiment later in the day.

Initial Observations:

We saw the sugar coating come off and float to the top of the hot water first.
Students discussed which jelly beans “lost” their colors first, whether the color of the jelly beans made any difference, what happened when we stirred them around a little, which glasses had “stuff” floating in them.

After a few hours:

You can remove the jelly beans and place them on paper towels for closer observations. My students also touched them and observed that the ones in the hot water were “squishier” (more dissolved) than the others and had no coating left on them. The vinegar jelly beans had a little coating left as did the salt water ones. The ones in the oil had all of the coating left and didn’t dissolve much at all.
What Dissolves Jelly Beans the Quickest?

What do you think will work best?

Record the Results:

What worked best?