

Get Wet  
Jessica Vo  
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For the “Get Wet” assignment, the image I captured used three liquids: milk, food coloring, and dish soap. My intention with this image was to have a stronger contrast between the colors and the reaction, but it ended up being a little bit more muddled than I expected. I had to do a second take to spread out the initial color dops without soap first in order to make the spreading flow better.

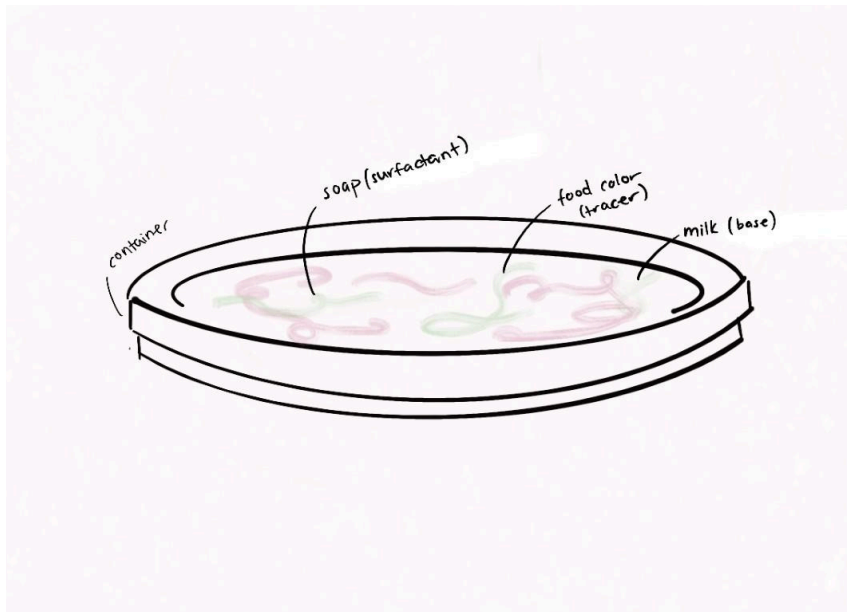


Image 1: Flow Apparatus Visualization

The different factors of flow apparatus start with the container. The container allows the liquid to spread out on its surface and provides space for the reactions to occur. The milk is then used as the base liquid covering the dish. Milk contains water, fats, and proteins, which creates different densities throughout the liquid. Providing a surface to observe the reaction/flow. Food coloring is the tracer aspect of the experiment. The droplets are added to the milk and serve to present visible flow movement. The patterns are created as soap disrupts the surface. Soap is the last ingredient which serves as a surfactant. It reduces surface tension which results in the movement of the reaction. The soap molecules interact with the fat in the milk, causing it to break down into smaller particles. Food coloring allows us to see this diffusion and how beautifully the molecule movements are. Lastly, the flow region of the reaction occurs on the surface of the milk. This interaction causes tension and spreading to visibly show the flow on the surface.

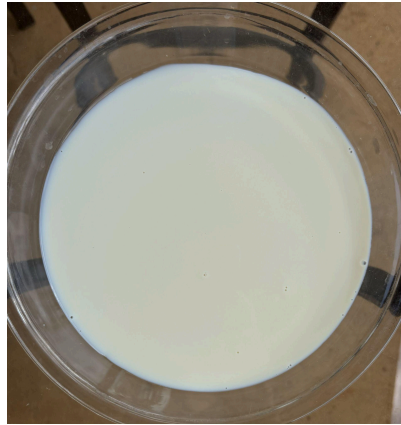


Image 2: milk in container



Image 3: milk with food color droplets

Over time, as the dish soap is reducing that surface tension, the movement of food coloring is changing with time. As the soap is disbursing, the molecules will eventually settle and reduce motion.

Through the use of the materials, dye, milk, and soap, the food coloring acts as a tracer. It allows us to see the movement of the surface tension breaking. The contrast between the milk and the food coloring also serves as a way to see flow patterns clearly.

With lighting used, I went outside to capture this image. The lighting outside was bright and sunny, providing just enough light to show the contrast and flow of the experiment.



Image 3: raw photo



Image 4: edited photo

I wanted to capture the visuals of the surface's movement up-close. Using the Fujifilm X-Pro3, there isn't a zoom attachment, so I had to get up close while adjusting aperture: 2, shutter speed: 1500 and iso: 200. The distance of the camera lens to the object was about 2".