

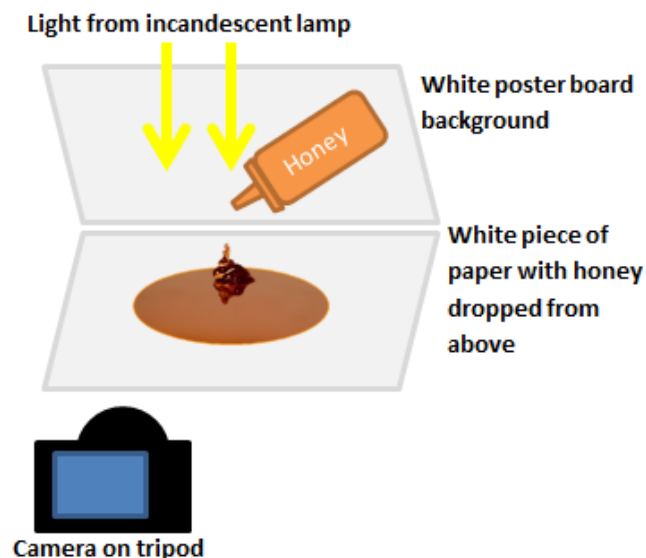
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Flow Vis
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Team Image 2 Report
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For this project we began experimenting with viscosity and the coiling effect that occurred when a viscous substance was dropped. We decided to all get together with some materials and begin the trial and error process. We were striving to achieve an image or video that displayed the movement and design (the coiling effect), created on the surface where the substance was dropped.

The thickness of the honey and dyed corn syrup when dropped in a constant line from about a foot created an effect upon landing. Because it is so viscous and slow moving, when it lands it has no where to go (splash), so it builds up pressure and begins to widen it landing based on what has already landed. It depended on the steadiness of the dropper's hands when releasing the substance. If they kept their hands fairly steady we were able to see the coiling effect very well and even rise it up to a tower of coils until it fell over and started over again.

We set up a station where we had a surface of white paper at eye level of the camera on a tripod. We then had one, two, or three people holding the honey or dyed corn syrup behind the surface with a white poster board in front of them to create a white background as well. We then timed it so that we would release the substances at the same time and recorded the entire process. We found that the honey was a better, more viscous candidate for this experiment, but to thicken the corn syrup we put it in the freezer for a couple minutes before filming. We began the process with an incandescent lamp above, but then realized we didn't need it because we had enough natural light and just filmed without it.



The field of view was quite large because we were so close to the object, about a foot away or less. We had the focal length set at normal, no zoom because we were close enough to the object and wanted to get all the different substances dropping in the same view. We were using a Kodak DSLR 5200. The aperture was at 5.6 while filming. Due to the light that was provided, for we had the exposure set to 800. I edited the picture with light contrast and saturation, and added slow motion only to a small portion of the video where I felt the coiling effect was most apparent. I was trying to achieve an emotional and vibrant video that expressed the effect clearly while looking aesthetically appealing.

I chose the video I did because it revealed the most in one capture. We had all three colors going at once and it was the cleanest video we had. I knew I wanted to do a video because just watching it happen was very beautiful to me and I wanted to make that as visible to others as possible. I added the song that I did, although it was different and some may have thought it was odd, because I felt like it went well with the flow of the honey. It also lined up with the slow motion. My friend, Brian Mulligan, who gave me permission to use it, composed the song.

I felt that the video did express my vision for an aesthetically pleasing expression of visual fluid dynamics. I would have been more pleased if I had a higher resolution but we were limited to use a digital camera rather than a video camera because of technical difficulties. I would like to explore this idea more with different variables, such as having the honey drop into a liquid and seeing how it might affect it.