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Team Third Report

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Bubble Popping in Slow Motion



Video URL: <https://youtu.be/XrVLv3LtFSI>

This photo was taken as our third team photo session. The issue with the timing was this was over thanksgiving break and unfortunately the team could not meet up. Therefore, we all did our own experiments. For this one I wanted to keep it simple but also interesting. The set up of this video was quite simple in regards that it was just a very large blown bubble that I captured popping in slow motion. The bubble was made from regular hand soap, and I used a cue tip to pop it, while holding the camera in the other hand. I thought a diagram of the photo was not needed as it is shown all in the video.

The soap bubble is held together by the surface tension of its soap molecules. Trapping air on the inside of its soap molecules, it has a small layer of water between two layers of soap molecules to keep the bubble's shape. When the surface tension on the soap is broken, then the entire bubble pops and the air trapped inside is then released.

As you can see from the video, the soap bubble when it pops, actually completely dissipates before the cue tip manages to hit the counter. This is interesting showing the speed at which the bubble pops.

The visualization effect of this video was to get enough light to show the outline of the bubble. This allows the viewers to clearly see when exactly, and how exactly the bubble popped in slow motion.

The photographic technique used was to record the object in slow motion to show the motion of the bubble when it pops. The video was shot on a Samsung galaxy s8, using super slow-motion mode which shoots at 960 frames per second, shot at 1080pi. The camera only allows a maximum recording length of one second, so I had to be quick and time the pop of the bubble perfectly. The post editing was done on the camera itself, and the only thing was to increase the contrast and turning the video black and white. This was so that it was easier to see the bubble outline. Along with that, the video editing also consisted of putting a bit of free Samsung background music in it.

For the future, the only thing I would change would be to change the surroundings of the video in order to focus strictly on the bubble itself. Another thing would be to try this with an even larger bubble to get a longer effect of it bursting.

Sources:

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