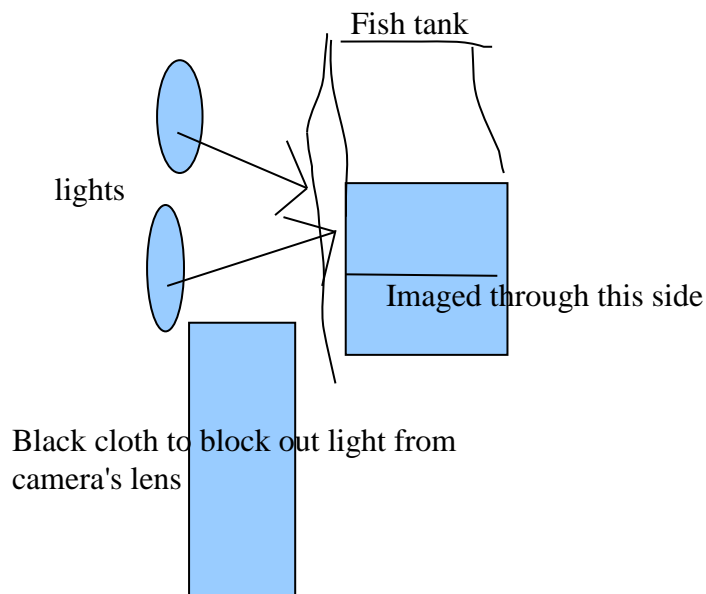


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Film 4200
Hertzberg
Group project 2

The purpose of the video was to capture the cavity the forms in a fluid when an object penetrates the surface. We used a variety of objects; such as, bolts with washers, legos, and chain links. While capturing images we realized that with out equipment it was mostly luck in the timing to capture a good image. Sequence capturing was a very useful tool to help increase the chances our timing was right.

A fifteen gallon fish tank was filled half way a cloth was eventually draped across part of the top to contain the splash from heavier objects. The tank was oriented so that the long side was exposed to lights and we shot through the smaller side. White boards were placed on the opposite sides of the lights and the cameras to help illuminate the water.



The visualization technique used, involved the refraction of the light pointed at the tank of water. In the image I have selected much of the cavity has been engulfed in white and creates flares along the edges of the cavity. This as well as cast off spray lines that occurred as a result of a 1/200 shutter speed. A black bolt with silver washers and nuts was dropped. The silver nuts and washers blend into the water and blend with the surrounding water. This essentially created a cone shape that had the top point removed and a slightly receded base.

The camera was placed about two and half feet from the tank, about 3 feet from the objects drop zone. The image was captured on a Canon Eos60d. The image was taken with a f-stop of 4.5 and a shutter speed of 1/200 of a second. The original image was a resolution of 3456x5184. The only editing done to the image was cropping out the sides of the tank. Resulting in a image that is 2289 × 1715.

The resulting footage shows the resulting effects of an impact onto a surface. Showing how the force that results from the mass of an object and the acceleration due to gravity disperses when the object comes into contact with a flat surface. The cavity that is created when this force is dispersed demonstrates the shape of the object that penetrated the surface. The object's shape affected the resulting cavity, creating a cavity only after the largest diameter section of the object. This could be improved by having a substance that was diffused into the water refracting more light. Allowing for a more distinct barrier between the cavity and the water's surface

