



**CALIFORNIA SCIENCE & ENGINEERING FAIR
2018 PROJECT SUMMARY**

Name(s) Aria K. Asmuth	Project Number 38480
Project Title Mixing Iodine and Bleach	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals I wanted to know the exact ratio of iodine to bleach to make 100mL of water stay clear. What is the bleach doing to the iodine in this demonstration? Why is it happening? Will the water remain clear?</p> <p>Methods/Materials After putting on safety equipment I filled 3 beakers with 100mL of water and added differing amounts of iodine to each beaker. Next, I slowly started to drop in bleach with a dropper and stirred it with a popsicle stick. Then, we waited to see what would change. My classmate helped me take notes.</p> <p>Results Much to my surprise, the water turned even darker in color while slowly dropping in bleach, but as I sped up the drop speed, it finally turned clear. after being left alone for a few minutes, it returned to it#s earlier dark color. So we added more bleach, waited, and it finally stayed clear.</p> <p>Conclusions/Discussion It turns out that the ratios all factored down to approximately 7 drops of bleach to 1mL of iodine. Finally, if anyone else or I decide to redo this experiment, I recommend that they drop the bleach at a constant speed, not reducing or increasing it to see if the liquid still gets darker.</p>	
Summary Statement I studied the effect that bleach has on iodine and found out how much bleach is required to make the iodine clear.	
Help Received None. I set up and performed the experiment myself and had a friend take notes.	