

## Lab Report

I've done a lab to answer one important question that I have been learning about. How does natural selection change the phenotypes within a population over time? To be specific, I tested on how environment changes affect a population whether good or bad and how it affects another population. I did a few steps in my lab. First, I made two different populations, dark red walking kidney beans and light red walking kidney beans and made a predator. I as the predator tried to eat as many kidney beans of both populations as possible in three separate days without any environmental changes. Then, I did the same thing but during an environment change to see how it affected both of the populations. Finally, I did the same thing after the environment change to see if I got different or the same results as the first try.

I recorded all of my tests on tables so that I can see what were the results from day 1 to day 9. As I was looking at my tables, I also added all the beans I ate as the predator in three different sections. Day's 1-3, 4-6 and 7-9 I summed up my total that I ate of both dark and light red walking beans and found the mean values. In my tables, you can see how the pollution affected both bean populations. Since the environmental change was the light red sky light, the light red bean population benefited from it because they were able to blend in with the sky light so it was hard for the predator to get them. Since the dark red bean population was more noticeable, the population decreased since more of them were eaten. That's when I knew the answer to the question, since the red light bean population was increasing, the phenotypes of the dark red bean population were going to change to adapt to the new environment or try at least. I would love to try this experiment again, but I would try not to go for one population more than the other so I can get better and more accurate results.