Goal 1.1

For goal 1.1 the three artifacts that I chose were my very first biology project here at longwood which was for biology 120 with Dr.Znosko. This project was putting plants in different amounts of light to see how plant growth would be affected. At first, I was nervous because this was my first real biology class as a newly declared biology major. The next artifact is my project for biology 250 with Dr.Shanle where we tested the difference in microbes of buffalo creek between flowing and stagnant water. I was also a bit nervous for this project because it was a big step up from the previous course because we had to go out without the teacher and collect our samples. It was nice though that we could independently do work without the teacher. As for the third artifact I chose my project from biology 324 with Dr.Shanle where we used CRISPR Cas9 to edit the genome of *Drosophila melanogaster* to express the gene wds (will die slowly) in which all offspring from the edited fruit fly died slowly. I was actually really excited for this lab as I had already had Dr.Shanle so I knew what to expect and I found the concept and application of genome editing extremely interesting. These three artifacts were spread throughout my academic career and with each one I gained another level of understanding the major principle of biology. This happened through practice, guidance, and application.