Cyanotyping is a form of printing which uses a chemical reaction to form the pigment Prussian blue. I begin making my cyanotypes by creating a 200 mL solution of 36 grams Ferric Ammonium Citrate and 20 grams Potassium Ferricyanide. This must be done in the dark because the chemicals will start to react in sunlight. I then paint the solution onto the material I want to print on. Most of the time I use watercolor paper but one time I printed on a shirt. Next, I make my negatives. When I first began printing I used plants from my backyard but recently I create designs digitally and print them onto translucent vinyl paper. I create a sandwich of glass, the negative, the printing material, and something rigid on and expose the print to the sun. It takes about 8 minutes of exposure for vinyl negatives and 25 minutes for plants. When photons in the UV spectrum from the sun hit the Ferric Ammonium Citrate a reaction occurs which allows Iron to combine with the Potassium Ferricyanide to form Prussian Blue. But because the chemicals are trapped in the fibers of the paper I need to develop the print in water so they are able to react with each Then all I have to do is let my print dry!

I first learned about cyanotypes by watching a Nile Red video where he synthesized the components of Prussian Blue, the pigment in cyanotypes, from scratch. I found the process of making cyanotypes fascinating and I planned on trying to make my own for my AP chemistry final project at the end of Senior Year. But because of the pandemic that never ended up happening. The following year I started researching printing methods to procrastinate studying for my spring quarter finals. I ended up ordering the chemicals to arrive as soon as school was out. This is what I made.