For my cutting board project I constructed the image above using a compass and straightedge like Euclid once did. The main constructions I used were perpendicular bisectors, arcs and isosceles triangles. I also constructed it by hand and then constructed it on the computer using Adobe Illustrator. I preferred the more modern tool of Illustrator because it was more precise and I might have do something like this in a future career. Getting to use new tools like compasses and straightedges has helped me think of maps and how a compass and maps connect.

In this project I investigated how I could mathematically:

1. Model the nutritional changes from seed to loaf to better understand the transformations from beginning to end of seed into a loaf (using linear piecewise functions).
2. Use bakers percentages to learn about proportions and making a bigger proportions of a recipe.
3. Model the visual changes from seed to loaf using rigid motions to show the transformation over time.
4. Use geometric constructions to design shapes with a compass and a straightedge.

I remember making our first bread. My group made bread that had a hard crust but was soft and sweet in the inside because I put about 30% sugar. We ended up eating it with chocolate pudding. The taste was nice and sweet. Almost as sweet as Hawaiian bread.

This is a picture of me forming dough for the first time. I was forming a boule. In this project I found out there are many types of methods for working with dough. Also that one piece of dough can turn into a lot of things.
Sodium (Milligrams) Within Steps

Nasser Melchor

From seed to flour the slope is positive which means in that period of time the sodium increases.

From seed to sheave the slope is negative. This means that the amount of sodium has decrease.

From flour to dough the period of time the sodium has increase.

From dough to risen the amount of sodium has decrease.

From risen to bread the period of time the sodium has increase.

Baking

Fermentation

Mixing

Grinding

Photosynthesis

\[ f(x) = \begin{cases} 
76x + 148 & \text{for } 2 < x < 3 \\
-7x - 5 + 3x & \text{for } 3 < x < 4 \\
2x - 5 + 5(3x - 5) & \text{for } 4 < x < 5 \\
95x - 565 & \text{for } 5 < x < 6 \\
\end{cases} \]