## Bio/Chem Tech Prep Summer Assignment

## Class of 2025

## Phase 1: What has been done in the past. Student projects

One of the most difficult parts of the Tech Prep project is finding an idea. Your job this summer is to see what past students have done. This might give you ideas for your project or at least give you an idea of what has been and can be done.

Old Tech Prep Projects is the link to a folder of old tech prep projects. Also, you can go to Mr. Hall's page on the Saunders website to see newer projects Hall, Harry / Home (yonkerspublicschools.org)

Look at FIVE projects and answer the following about the Tech Prep project:

- a. What is the title, authors name and date of the project?
- b. What is the hypothesis?
- c. What procedure or methods were used? (There will be much to write here...)
- d. What was the conclusion of the project?

Below is an example of what you have to write for each project you look at: The title of the project is:

A Quantitative Analysis of BPA at Different Temperatures by Leonardo Gobbato.pdf - OneDrive (sharepoint.com)

- 1. Quantitative analysis of BPA from cans at different temperatures.
- 2. Equipment
  - a. Incubators (to make different temperatures)
  - b. Spectrophotometer
  - c. Cans
  - d. Chemicals
  - e. Glassware

## 3. Procedures

- a. Use the incubators to make different temperatures
- b. Put water in the cans and put them in the incubators
- c. Let them sit for two weeks
- d. Test the water in the cans with a chemical that reacts with BPA and makes a color
- e. Use the spectrophotometer to read the color (a spectrophotometer reads colors and then that data can be used to see how much chemical is in a sample of water)
- f. See how much chemical is in the water which will tell how much BPA was there
- g. Compare results and determine which temperature had the most chemical
- 4. Why? BPA is used to line the interior of metal cans so that the contents don't react with the metal. The FDA says it is safe up to a point. Recently, it had been banned in the production of

baby bottle but not in other items. BPA has been linked to many bad things including reproductive problems and hormonal irregularities in humans. This project will show the consumer that certain temperatures are not good for storing cans lined with BPA because it ends up in the food contained in the can.