

FOOD CHEMISTRY

Introduction:

Cooking goes hand-in-hand with chemistry with a series of simple and complex reactions. A cook must know how ingredients will react with each other, and as we have learned, everything is made of elements.

Objective:

Identify a food that undergoes a chemical change in its composition. Then, research the chemistry involved in the process to make that food item. Each student will need to understand the process to how this item was made and its composition. Also, each student will have to identify at least one chemical reaction that takes place during the preparing or eating of the food item. Last, each student will present their project that includes all of the necessary information listed below. Presentations must include a visual of either a power point presentation or a poster. Students are welcome to bring the food in to be shared amongst the class.

Requirements for the presentation/poster:

- **20pts** - A description of a food that requires a chemical reaction
- **10pts** - A word formula reaction and a balanced chemical formula of a chemical reaction
- **10pts** - Describe the type of reaction being used as the example.
- **10pts** - Describe the energy transformation of the reaction being used as the example.
- **10pts** - Explain how this food item would be different without this chemical reaction.
- **10pts** - Four visual pictures/videos
- **30pts** - Creative, Professionalism, and Organized