**Introduction**

In this assignment, you will plan and do an experiment with two substances. You will look for changes to the substances and decide if a chemical reaction happened.

As you complete this assignment, you will practice the skill of **Idea Design and Refinement**. This skill will help you be a well-rounded learner and valuable contributor to your community.

**Instructions**

Scientific experiments often need careful changes to how things are done. Paying attention to what you see and the results will help you understand them better.

**Step 1:** Fill out the [Patterns of Change Worksheet](https://byuis.instructure.com/courses/1046/files/1767752/download?wrap=1).

**Step 2:** Choose two substances to experiment with. You can use one of the example pairs below or one of your own:

* milk and vinegar
* lemon juice and baking soda
* hydrogen peroxide and yeast

***Important***

You may not use baking soda and vinegar for the experiment. The lessons used that pair as an example. That pair also appears in the example experiment below. If you use baking soda and vinegar, you will get a zero on the assignment.

**Step 3:** Fill out the Plan the Experiment section of the worksheet.

**Step 4:** Gather the materials for the experiment.

**Step 5:** Read the Experiment Results part of the worksheet so you know what to look for during the experiment.

**Step 6:** Do the experiment according to your plan.

**Step 7:** Fill out the Analyze the Results section of the worksheet.

**Step 8:** Submit a Word doc, PDF, or image of your worksheet on this page.