Changes

In this investigation you will determine whether or not chemical change has taken place. Careful observations are important in gathering evidence. A chemist must take time to look for the kinds of evidence that indicate a chemical change.

1. Before you begin this investigation, write down the things you think would be evidence of chemical change.
2. Begin by putting on your safety goggles.
    a. Place ¼ teaspoon of Powder A and ½ teaspoon of Powder B into a plastic baggie
    b. Place 5 mL of Red Liquid in a Dixie cup. Carefully place the cup into the baggie, making sure that no liquid touches either of the powders.
    c. Seal the plastic baggie securely. Tip the cup over and mix the chemicals.
3. Write a description of what you observed.
4. Record any evidence you observe that you think indicates a chemical change has taken place.
5. Next, read the rest of this investigation and <u>design a data collection sheet</u> you can use to for recording your information throughout the entire investigation. Carefully record each step in a format that is easy to follow so it can be shared with others as well as referenced later during a large or small group discussion.

a. Predict what would happen if you tried the experiment again but left out one of the chemicals. b. Test your prediction. Record all the important information c. Try it again, leaving out a different chemical.	**<u>OR</u>**	a. Speculate what would happen if you varied the amount of one of the chemicals. b. Test your prediction. Record all the important information c. Try it again, varying the amounts of the same chemical or trying it with different substances.

6. Analyze and summarize the results of your investigations.
7. Record things that you think are evidence of a chemical change.
8. List any questions you still have.
9. What discoveries about chemistry did you make during this investigation?
10. If given time, what else might you like to try to discover about these substances or reaction?