

Chemistry and Candy

Creating candy is a chemical process! A chemical process happens when ingredients are combined and change. Here is an example:

Imagine that you put butter, milk, and cocoa powder in a bowl.



Then, you pour the ingredients into a pan on a stove.



Then, you add heat and stir the ingredients.



Chocolate is made! The chocolate can then be used to make any type of candy with chocolate. This is an example of a chemical process. The ingredients were combined together. Once they have combined together, they cannot be separated.

Examples of Changes

Some chemical processes can be reversed, which means that we can undo the change that we made. These reactions might change how the material looks or feels, but doesn't create a new material.



Example: A popsicle that melts can be re-frozen, turning it back into a popsicle!

Some of these chemical processes cannot be reversed, which means that we cannot undo the change that we made. When a reaction like this happens, the ingredients form an entirely new material.



Example: When we heat the ingredients for chocolate, we make chocolate. The ingredients cannot be separated after they are heated together.

My Experiment Overview

Today, you will learn more about pudding! You will perform two different experiments to see what happens when you try to change the pudding.



First, you will combine pudding and M&M candies. Then, you will make observations of what you see and write them down on your handout and decide if this change is reversible or irreversible.



Then, you will heat the mixture of M&Ms and pudding! Adding heat to something makes it melt. Then, you will make observations of what you see and write them down on your handout and decide if this change is reversible or irreversible.



My Pudding Prediction

Write whether you think the following changes are reversible or not reversible.

- Reversible means that you could go back and undo what you changed.
- Not reversible means that you can't go back and undo what you changed.

Is adding M&M's to your pudding reversible or not reversible?
(circle your answer)

Reversible

Not Reversible



Is heating M&M's and your pudding reversible or not reversible?
(circle your answer)

Reversible

Not Reversible



My Pudding Observations

Write your observations about what happened when you added M&Ms to your pudding:

Write your observations about what happened when you melted the M&M/pudding mixture: