



# CAKE CHEMISTRY!

An experiment! (Adult assistance required)

Naveen realized baking was a lot like science. You needed to follow a set of rules to get a predictable result. But what difference does each ingredient make in a cake?

## Supplies:

- A muffin tin
- 5 cupcake liners
- Food coloring (four different colours)
- 4 eggs
- Sugar
- Butter
- Flour
- Baking powder
  - Milk
- Toothpicks

## A Basic Cupcake Recipe:

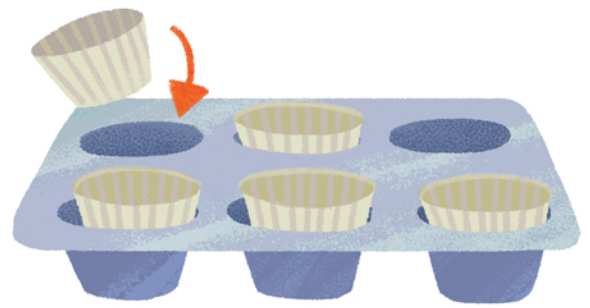
- 1 egg white
- 2 tablespoons sugar
- 2 tablespoons butter, melted
- 1/4 cup flour
- 1/4 heaping teaspoon of baking powder
- 1 1/2 tablespoons milk

## Process:

1. Preheat oven to 350°F.



2. Place five cupcake liners in the muffin tin.

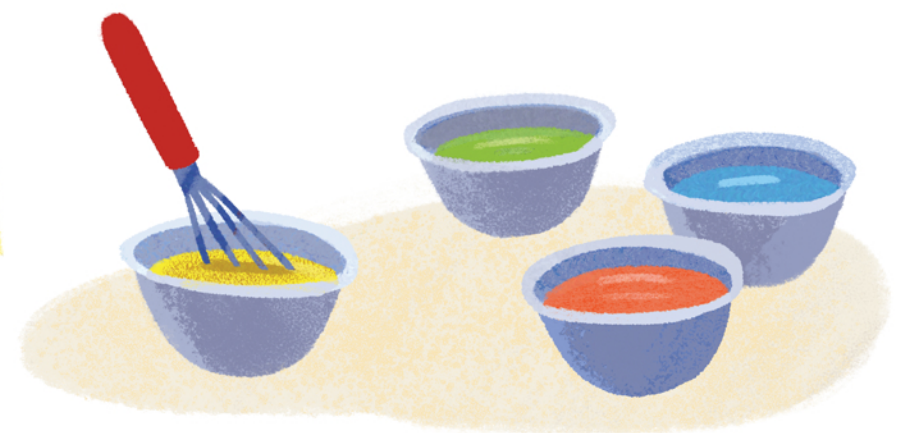


3. Make the basic cupcake recipe. Pour it into one spot in the muffin tin.



4. Make the basic recipe for more times. Each time, omit one of the following ingredients: egg, butter, milk, and baking soda. Add a drop of food colouring to identify each ingredient left out: yellow for egg, green for butter, blue for milk and red for baking powder.

**\*Tip:** Fill each cupcake liner 2/3 full. Excess batter can be discarded.



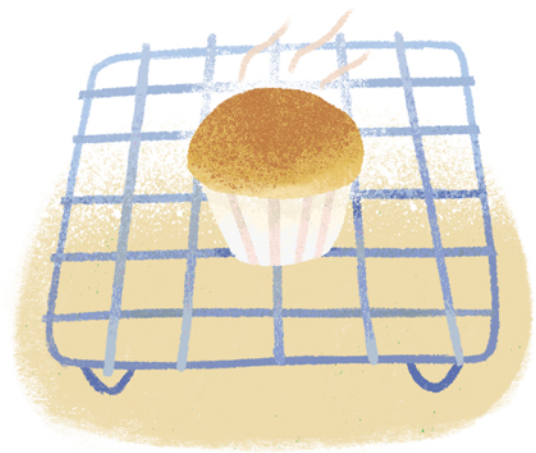
5. Pour each mixture into the remaining liners.



6. Bake in the oven for 10-15 minutes, or until a toothpick can be removed cleanly from each cupcake.



7. When cooled, remove cakes from pan.



## Taste Test!

- How is the texture of each cupcake different?
- How did each cupcake rise? Which ones didn't?
- How did each cupcake taste?
- How does each ingredient effect a cake?



## Cake Creator Challenge:

Try this experiment again, but this time double each ingredient.