

Date:



# Scientific Method Lab:

Name:

## Skittles: Mass and Amount

### Question/ Problem:

How accurate are Skittles packages to one another in terms of mass and total number of Skittles?

### Introduction:

According to the Skittles website, there are 65 Skittles per 61.5 g package with the colors red, orange, yellow, purple, and green. Could the machinery that controls this portioning be 100% accurate when filling the bags? We will find out in this lab!

### Develop a hypothesis:

### Procedure:

1. Each package of skittles is assigned a number, find the mass of each package using a scale.
2. Record the data for each package and calculate the average.
3. Count the total amount of skittles in each package, record the data, and calculate the average.

	Package Number					
	1	2	3	4	5	Average
Actual Mass of Package (g)						
Total Number of Skittles						

### Analysis:

Mass on the front of the Skittles Package	
Average actual mass	

Total amount of Skittles as stated by the company	
Average total number of Skittles found	

1. Did the mass on the package match the actual mass for each package?  
What was the highest mass? What was the Lowest mass?
2. What is the difference in mass between what the package says and what you measured?  
What do you think is the reason for this difference?
3. Did the total number of Skittles in each package match what the company says there should be?  
What was the lowest amount? What was the highest amount?
4. What is the difference between the expected number of Skittles and the average counted?  
What do you think is the reason for this difference?
5. Was your hypothesis supported or rejected? Give evidence in your explanation.