

NAME \_\_\_\_\_

Skittles Lab



Intro: Now that you have learned several different ways to collect data you are going to apply that knowledge to actual data. You and your lab group will be receiving a cup of Skittles. THESE SHOULD NOT BE EATEN. (there are some on my desk that are the ones to eat)

This Lab has 4 parts. You cannot move onto the next part until the teacher has seen your completed work. If at any time I catch you eating you lab equipment (the skittles) you will be given a ZERO for the day. I would suggest making data tables first so you have a place to record the data.

PART A

1. SEPARATE THE CUP OF SKITTLES BY COLOR
2. COUNT THE NUMBER OF SKITTLES IN EACH COLOR GROUP
3. CREATE A DATA TABLE THAT REPRESENTS THIS INFORMATION
4. DESIGN A GRAPH OF YOUR DATA
5. SHOW COMPLETED WORK TO THE TEACHER

PART B

1. KEEP YOUR SKITTLE SEPARATED BY COLOR
  2. FIND THE TOTAL MASS OF EACH COLOR GROUP USING A BALANCE
  3. RECORD THE RESULTS IN A DATA TABLE
  4. GRAPH THE DATA
- Handwritten note: SKIPP!*

Part C:

1. KEEP YOUR SKITTLE SEPARATED BY COLOR
2. CALCULATE WHAT PERCENT OF YOUR TOTAL SKITTLE COUNT BELONGS TO EACH COLOR
3. MAKE A DATA TABLE OF YOUR RESULTS
4. DESIGN A GRAPH FOR THIS DATA

PART D

1. FOR THIS PART, YOUR SKITTLES DO NOT NEED TO BE SEPARATED BY COLOR
2. USING THE BALANCE FIND THE MASS OF ANY 5 SKITTLES
3. ADD FIVE MORE SKITTLES TO THE SCALE AND FIND THE NEW MASS
4. REPEAT STEP 3 UNTIL YOU HAVE FOUND THE MASS OF AT LEAST 50 SKITTLES
5. CREATE A DATA TABLE THAT SHOWS THIS INFORMATION
6. DESIGN A GRAPH OF YOUR DATA

**Questions:**

1) Look at your graph for part A. Explain which variable is on the x- and y-axis and why you chose to put them there.

~~2) According to data collected in part B, which color group had the most mass? How would someone be able to tell from looking at your graph that this group had the most?~~

2) Look at your graph for part C. Why did you choose this type of graph over the other two types of graph?

3) Describe shape/slope of your graphed data for part D.

4) Why do you think it looks like this?

5) Using the graph from part D, estimate the mass of 1 skittle: \_\_\_\_\_

32 skittles: \_\_\_\_\_

59 skittles: \_\_\_\_\_