

Graphing Skittles



Step 1: In teams, predict how many skittles are in a snack bag of skittles.

Step 2: Complete the columns on the worksheet-color, prediction, fraction, decimal, percentage.



◆ To write as a fraction

$$\frac{\text{number of color}}{\text{total number of skittles[all colors]}}$$

◆ To write as a decimal:

divide the number of color by the total number of skittles [all colors]

Round to the nearest whole number



◆ To write as a percent

Divide the number counted for the color by the total number of skittles [all colors] and press the percent key on the calculator



Step 3: Use the *Create a Graph* website, to graph the data.

<http://NCES.ED.GOV/NCESKIDS/GRAPHING/>



Step 4: Answer these questions. Write answers in Interactive Notebook.

- * What color did you predict would have more, have less?
- * Why did you choose to use a bar/pie/line graph to show your data?
- * Did the graph turn out as you expected?
- * Do you believe this was the best graph to use to represent your data? Why or why not?
- * Which type of graph do you believe best illustrated the data?
- * What does the graph show you about your prediction?



Step 5: Count the skittles in the snack pack and record the data and complete the columns.

Step 6: Return the the *Create a Graph* website.



Step 7: Create a bar graph and a circle graph.



Step 8: Answer the questions in your Interactive notebook.

- After comparing your predictions and graphs with the actual numbers, were your predictions supported?
- Did you notice a pattern of particular colors as you compared the graphs?
- Which type of graph best illustrated the data?
- In looking at the bar graph, what color has the highest number? What color has the lowest number? Can you easily tell from the bar graph the percentage of each color in the bag?
- In looking at the pie chart, what color makes up the highest percentage of the bag? What color makes up the lowest percentage? Can you easily tell from the pie chart the number of each color in a bag?
- For the line graphs, look at your graph for the orange Skittles. What group had the highest number of orange Skittles? What group had the lowest number of orange Skittles?
- What graph do you think would be the most helpful in determining the number of red Skittles in a bag compared to the total number of Skittles? What is the number of red Skittles compared to the total number of Skittles?
- What graph do you think would be the most helpful in determining the average number of yellow Skittles? What is the average number of yellow Skittles?

Step 9: Each team may print a bar graph and a circle graph.