

Edible Statistics

Materials:

Skittles (1 original packet for each student, 2 for the teacher)

Data Sorting Sheet (included)

Individual Graphs (Included)

Group Graphs (included)

Small squares of paper that match the colors of the skittles, or the same color crayons

Orange, green, yellow, purple, red

2 Prediction Charts (make them large enough for the class to use) (use the individual graphs as an example)

Purpose:

Students will work individually and in groups to collect, organize, represent and interpret data .

Skills:

Graphing, probability, data analysis, statistics



Lesson

Step 1:

Teacher holds up a bag of skittles and explains that today we are going to be conducting research with the skittles candies that are in the bag.

Question: What can we find out about these skittles? (color, number in bag)

How can we organize these skittles? (color)

Step 2:

Teacher explains that the goal or mission of the class will be to count each skittle and add up the total of each color.

Question: Can you guess which color will be used the most in making the skittles?

Using pre-cut colored squares allow students to make a prediction and add their prediction to the class graph. (This can also be done by coloring in a square on the graph)

Teacher opens 2 demo packets of skittles and sorts the colors for the class to see. Complete a second prediction graph with the class.

Looking at the two prediction graphs, ask students if any of them changed their mind after looking at the two bags of skittles. Why? Or Why not?

Step 3:

Pass out sorting sheets for students and give them each a bag of skittles. Let them open the back and sort the skittles by color.

Discuss predictions.

Pass out individual graphs and have students record the information. (Teacher may need to explain how to graph) Explain to the students that anyone should be able to look at the graph and tell which color had the most, least, same, etc.

Line graphs up on the wall or floor for everyone to see.

Step 4:

Work in Groups to get group totals. Pass out Group totals Data sheet. Explain to the students they need to work out a procedure to collect data from the whole group. Record the results.

Display graphs for the class to see.

Step 5:

Get the class total. Using the group totals, work as a class to decide how to transfer the group totals to a class graph.

Step 6:

Reflection Questions:

1. Look at both Prediction graphs: Did the class predictions match the actual totals?
2. Look at your individual graph, does it match the class graph?

Name _____

Skittles Graphing

15					
14					
13					
12					
11					
10					
9					
8					
7					
6					
5					
4					
3					
2					
1					
	Red	Green	Yellow	Orange	Purple

What color did you have the most of? _____

What color did you have the least of? _____

What was your total number of Skittles? _____

Skittles Graphing

Group Data

25					
24					
23					
22					
21					
20					
19					
18					
17					
16					
15					
14					
13					
12					
11					
10					
9					
8					
7					
6					
5					
4					
3					
2					
1					
	Red	Green	Yellow	Orange	Purple

What color did your group have the most of?

What color did your group have the least of?

What was the group total number of Skittles?.....

