

Candy Survey Activity Lesson Plan

Objectives:

- Have the students become familiar with surveys.
- Have the students experience data collection and working with data.
- Provide experience graphing simple counts and comparing different sets of numbers.
- Practice interpreting graphical information.
- Provide examples and introduce the concept of proportionality.

Plan

1. Begin with a discussion of ways in which an individual can answer a question of interest. For example, in this activity I told the students that I wished to know what kind of candy and how much of each I should buy for Halloween.
 2. Introduce the idea of a survey and some of the things that are required for to conduct a survey. Should the survey be open form or closed form? What are the strengths and benefits of each? If closed form, how many types of categories should one use?
 3. Have the students go home and survey some number of people. Give them a worksheet like the one below to use. Have them graph their results and answer a few questions that require interpretation of the graph.
 4. If you can, compile the all of the students' results into a spreadsheet to investigate the same types of questions, but with the full class data set.
 5. Transform the data onto a proportional scale and show the both graphs next to each other. Discuss the similarities and differences between the actual counts and proportion of votes. Interpret proportion of votes in terms of the proportion of money to spend on each type of candy.
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Candy Survey

Name: _____

Last week, we discussed how we could figure out what types of candy I should purchase for Halloween. We got some really good information, but I need more help from you. Each student in the class will do a similar survey with ____ (insert survey size here) friends and family that they know. Last time we decided on five categories: chocolate bars, chocolate candies, hard candies, gummies, and lollipops. Let's stick with these types of candies, but let's also record whether the survey taker was a girl or a boy. This survey is a type of experiment like we did with the crickets in science lab. What is one hypothesis you can make about the type of candy preferred by people?

Hypothesis: _____

The first thing to do is to find a friend or family member. Ask them which of the five categories of candy they prefer over the others. If they need help with the categories, give them some examples of the types of candies that are contained within each category. For example, milky ways are chocolate bars and jolly ranchers are hard candy. If you ask a girl and she picks hard candies, put one tally mark in the box for girls with hard candies. I have done this one for you already.

	Girl	Boy
Chocolate Bars		
Chocolate Candies		
Hard Candies		
Gummies		
Lollipops		

Once you have completed your survey, tally up the votes and put the number of votes in each category in the table below.

	Girl	Boy	Total
Chocolate Bars			
Chocolate Candies			
Hard Candies			
Gummies			
Lollipops			

What was the most preferred candy overall? _____

Did boys and girls have different preferences? _____

What can you say about your hypothesis after doing the survey? _____

Now graph your results. Be sure to include the x and y axes, a title, and a key to mark the differences between boys and girls.

