

Survey (Math)

- The students have demonstrated proficiency at addition, subtraction, multiplication, and division of integers, decimals, and fractions and the use of Microsoft Excel application.

Introduction:

You are going to conduct a survey. You will be using Microsoft Excel as your application for this project. You will present the results of the survey to the class. There are several steps that must be completed to make this project a success. You may need to review fractions and decimals at "Comparing Fractions and Decimals," http://www.aaaknow.com/g8_64axl.htm

Procedure:

- You must first decide on a survey question. An example survey question is, "What is your favorite chocolate candy bar?" Your survey question must be a question that is appropriate for you to ask and present to your classmates. Think of it this way: Is this something I would want my parents to know that I'm asking? If the answer is no, it's not appropriate.
- You must decide on a target population and the number of people you will survey. For instance, your target population could be student at our school that is ages 13-14, and you will survey 20 students. Each person that you survey must be contained in your target population. The number of people that you survey must give you an adequate representation of the target population. For example, if you survey 20 people, you may get 20 different responses, but the more people that you survey, the more representative your survey will be.
- You must conduct the survey. You must be careful, however, to not interview the same people. You should record your results.
- After you have completed your survey, you will count up the number of people who chose each option. You will then enter your results into a Microsoft Excel spreadsheet. Your completed spreadsheet should be similar to the one shown below for chocolate candy bars preferences.

Chocolate Candy Bars	Snickers	Milky Way	Babe Ruth	Butterfinger	Hershey Bar
Number of Students	7	5	4	6	3

- Now you will determine the fraction and decimal that corresponds for each of the responses to your survey. You divide the number of students for each of the categories by the total number of people that you interviewed. Do this on your own first. You will then check your answers using Microsoft Excel. To calculate the decimal equivalent in Excel, click on the cell directly below your first value. (In the above example, I would click the cell directly under the 7 under Snickers). Then type in =, click in the cell with the number (in my case, 7), type /, and then put the total number of people you surveyed (in my case, 20). The command will look something like this: = B2/20. Once you get a decimal value, click in that cell, and drag across to your last value. (In my case, I would drag until I was under the 3 under Hershey Bar. The decimal equivalents should now be under each cell. Check them with what you calculated.
- Finally, you will make a circle graph which shows your results. Highlight your categories and number of students. Then click on the Chart Wizard on the Tool Bar for Excel. Select the Pie graph option, and then click next. You should see a circle graph of your data. Click next again. Title your graph and then click Finish.
- Prepare for your presentation. Print your graph in color. We want to know what your survey question was, who you chose to survey, how many people you surveyed and what your results were. Congratulations! You have completed your project.