

Participant Page: Generating Data

Part 1:

 Input formulas for all cells containing a red hint flag: Total Number of People Surveyed, Total Percent of People Surveyed, and Percent of People Surveyed for each interval.

Part 2:

- Complete Grams of Fat table by entering data into the Number of People Surveyed using the Data Statement Cards. Manipulate data until all cards have been satisfied.
- Save as: JDoe_Grams_of_Fat_Spreadsheet
 - 1. What approach did your group take to complete the table?
 - 2. What type of manipulation did it take to make your data set fit the Data Statement Cards you were given?
 - 3. How would you manipulate the data when you have half or a third of a person represented in your data set? Is it okay to have half a person? Why, or why not?
 - 4. What is the smallest <u>meaningful</u> value you can have for the total number of people surveyed for your data?
 - 5. How does using a <u>dynamic</u> spreadsheet encourage student learning and thinking?
 - 6. How could you combine what you just did on the spreadsheet with what you do in the classroom?



Participant Page: Time to Play

Part I. Collecting Data!



- 1. Sort and place data cards into the brown-paper bags by the defined intervals. Label each bag.
- Based on the information in your table, draw data cards out one at a time with replacement.
 Example: You have 5 people that stated they ate between 0 and 9 grams of fat each day. Then you would make 5 pulls from the bag labeled 0-9 grams of fat.
- 3. Record results as you draw data from the bags into the Data Pieces table found on sheet 2 of the Middle School-Explore Explain 2 Spreadsheet spreadsheet.
- 4. Continue until all data has been generated.
- 5. Format the Measures of central tendency using the red flag hints.
- 6. Record the mean, median and mode. Which of the measures of central tendencies best describes your original data set, and why?

Mean:
Median:
Mode:

7. Save your work as **JDoe_Grams_of_Fat_Spreadsheet** on your desktop.

Part II. What If?

In the following What If's: Manipulate the data elements in a way that keeps the Data Statements Cards **TRUE**. Open your spreadsheet and begin.

1. What if, you create a data set in which the mean is the same as the mode:

What type of changes did you make to your data set? Were you able to make the changes to satisfy these parameters?



(Part 2 continued)

2. What if, you create a data set in which the mode would be the best measure of central tendency to use to describe the data set:

What type of changes did you make to your data set? Were you able to make the changes to satisfy these parameters?

3. What if, you create a data set in which the median would be the best measure of central tendency to use to describe the data set:

What type of changes did you make to your data set? Were you able to make the changes to satisfy these parameters?





Explore/Explain 2: Intentional Use of Data

TEKS	
Question(s) to Pose to Students	
Cognitive Rigor	KnowledgeUnderstandingApplicationAnalysisEvaluationCreation
Data	Real-TimeArchivalCategoricalNumerical
Setting	Computer Lab Mini-Lab One Computer Graphing Calculator Measurement Based Data
Data Source(s)	