

Math 2 Unit 4
Data Analysis Project

Name _____

Date _____ Per _____

Project Overview:

1. Obtain quantitative data that is of interest to you
2. Graph the data using two of the methods discussed in class on _____.
 - a. Box Plots
 - b. Dot Plots
 - c. Histograms
 - d. Stem and Leaf Plots
3. Interpret the results through your choice of display (poster, booklet, Glog, etc...)
4. Written Report: What to include in your report--
 - a. Why did you choose the representations you did?
 - b. Analyze the meaning of the mean, median, mode, range, IQR, standard deviation, and mean absolute deviation of your data.
 - c. Make a conclusion about your data based on the statistics

Experimental Design:

- Collect at least 20 data points.
- Do not alter your experiment or the data you collect to fit some notion of correct data. Remember, the study of statistics depends on variability.

Working with Others:

- You may work in pairs, but each group member will evaluate their partner based on their effort and quality of work.

Due Dates:

- Topic chosen by _____
- Report due by _____

RUBRIC

	Pts Earned	Pts Possible
What data did you analyze? (DUE _____)		4
Two different graphical representations of your data Graphs must be accurate, neat, labeled, and readable.		10
Display of report - neat, thorough, organized, readable		4
<u>REPORT</u>		
Explanation of why you chose that particular type of graphical representation		6
Use descriptive statistics techniques to explain your data (mean, median, mode, range, mean absolute deviation, standard deviation, IQR)		21
Interpret the descriptive statistics What does the mean, median, etc tell you about your data?		28
Conclusion		5
Cite Sources for data collection		2
YOUR GRADE		80

Possible Topics:

- High prices for 100 stocks on May 22, 2007
- Price of a gallon of milk at 30 local stores
- Price of a gallon of gas at 30 local stations
- Maximum daily temperatures for Cleveland from Jan-May 2006
- Monthly normal precipitation for a particular city
- Batting averages of Indians players in 2006
- Auto theft rates per 100,000 people in a particular city
- Murder rates for a particular city
- Selling price of 30 homes in your area