**Mean/Median?**

If data is symmetric – use mean and standard deviation (why? Data not affected by extremes; balanced)

If data is skewed left/right, use median and quartiles

1. The following dotplot shows data for the number of music CD’s owned:



1. Which would better summarize the center and the spread: median/quartiles or mean/standard dev.?

Justify your answe

1. Are shorter internet domain names better? Below is the histogram for the 500 most popular Web sites.
2. Estimate the mean and median of the distribution.
3. If you wanted to argue that shorter domain names are more popular, which measure of center would you use – the mean or the median? Justify your answer.
4. Does mercury content in canned tuna differ by country of origin? Use the boxplot below to write a few sentences comparing the distributions.



1. Electoral votes: To become President of the United States you must win a majority of the electoral votes that are cast in the Electoral College. The following is a stemplot of the number of electoral votes for each of the 50 states and the District of Columbia.
2.  Find the 5 number summary
3. Are there any outliers?
4. Make a boxplot of the data.
5. Which measures of center/spread would you use to summarize the data (mean/s or med/quart)?
6. You are planning a party and want to know how many cans of soda to buy. Would you rather know the median number of cans a person will drink or the mean number of cans? Explain.
7. A school system employs teachers at salaries between $18,000 and $40,000. If every teacher is given a $1,000 raise, what will happen to the:
	1. mean salary
	2. median salary
	3. quartiles
	4. standard deviation