

Chem 197  
Fall 2019

### measurement exercise iii

The file pennies.csv contains a record of the masses for 100 pennies organized by the decade in which they were minted: the 1970s, the 1980s, the 1990s, and the 2000s. Calculate the mean, the median, the standard deviation, and the interquartile range for the pennies in each decade. Create boxplots for the pennies in each decade.

In a short, written report of approximately 250 words, comment on the unusual nature of your results and do some research into the minting of pennies that can explain what you see. Your report should provide values for the four statistics that you calculated and include a copy of your boxplot (*note: you can save an .eps version of your boxplot that you can insert into your Google Doc or Word file*). Your report is due in class on Friday, August 30<sup>th</sup>.