Investigative Task \#1<br>Chapter 3: Displaying Categorical Data<br>Assigned: 9/10/18 Due: 9/17/18

We collected data as a class in a large spreadsheet. The data is on the class website if you need to re-access it.

Your job as a statistician is to display the categorical data from ONE of the columns in our survey pictorially using 4 different methods. Remember to label all of your pictures/graphics dutifully and give each picture/graphic a title. Depending on which category you choose, when you do your counts you will have decisions to make. For instance, if you choose hair color, does Strawberry Blonde count as Blonde or is it counted as its own pile? There aren't right or wrong choices here, just make your decisions clear.

YOU MUST INCLUDE EITHER A MARGINAL/CONTINGENCY TABLE OR CONDITIONAL DISTRIBUTION TABLE AS ONE OF YOUR CHOICES. This means that you need to ask a question about how two categories relate so that you can choose the appropriate second column to use. (Note: We will learn conditional distributions $9 / 11 / 18$, so once you've done your first three methods you may want to wait to do your fourth.)

Based on these 4 graphics, what conclusion can you draw about the column/category that you chose? Did you see a relationship or dependence of this category on another when you made your contingency or conditional distribution table? What was the relationship?

This assignment will count as a project. You may write everything out by hand, or you may use a computer, but either way this should be a formal document that is written in complete sentences. If you choose to use a computer, but you do not know how to create the necessary graphics using your computer, you can leave space in your typed document and do them by hand after printing.

Chapter 3 in your textbook will be a valuable resource for this assignment!
You may confer with your peers, but each student must turn in their own assignment - this is NOT a group project.

We will have additional time in class to work on this. So bring all necessary materials with you to class.

Probability \& Statistics
B Period
Ms. Gladstone

> Investigative Task \#1
> Chapter 3: Displaying Categorical Data
> Form to be completed IN CLASS MONDAY

Name $\qquad$ Due: 9/10/18

Which category have you chosen to investigate? $\qquad$
Which secondary category have you chose to compare with the first?

Provide your count/preliminary table of data from your chosen category. This table should have a title and be appropriately labeled.

