LAB 2A: All About Distributions
Response Sheet

Directions: Record your responses to the lab questions in the spaces provided.

In the beginning ...

How to talk about data

Let's begin!

- **Write down the `names` of the 4 variables that contain the point-totals, or *scores*, for each personality color.**

- **Write down the `names` of the variables that tell us an observation's introvert/extrovert designation and whether they are involved in *sports*.**

- **How many variables are in the dataset?**

- **How many observations are in the dataset?**

Estimating centers

- **Which values came up the most frequently? About how many people in your class had a score similar to yours?**

- **What, would you say, was a *typical* score for a person in your class for your predominant color? How does your own score for this color compare?**

Means and medians

- **Use a similar line of code to calculate the `median` value of *your* predominant color.**

  – **Are the `mean` and `median` roughly the same? If not, use the `dotPlot` you made in the last slide to describe why.**

Name_____   Date_____

<p style="text-align:center">**LAB 2A: All About Distributions**
Response Sheet</p>

Estimating Spread

- **Look at the spread of the scores from the mean score then complete the sentence below:**

  Data points in my plot usually fall within _____units of the center.

Mean Absolute Deviation

- **How close was your estimate of the spread for your predominant color (from the previous slide) to the actual value?**

Comparing introverts/extroverts

- **Describe the shape of the distribution of scores for the extroverts. Do the same for the introverts.**

- **Do introverts and extroverts differ in their typical scores for your predominant color?**

- **Based on the MAD, which group (introverts or extroverts) has more variability for your predominant color's scores?**

On your own

Perform an analysis that produces *numerical summaries* and *graphs*.

- **Then, write a few sentences that address this statistical investigative question and considers the *shape, center* and *spread* of the distributions of the graphs you create.**