Name:_____ Date:_____

Practicum
The Summaries

Using the *Food Habits* or Personality Colors data, develop a new statistical investigative question that compares 2 or more groups. Some sample statistical questions (about other data sets) are below:

- Which gender shows a bigger range in age, male or female Oscar winners?
  Grouping variable: gender (male, female)
  Variable: ages
- Do children, teenagers, or adults spend more money on candy?
  Grouping variable: age-group (child, teenager, adult)
  Variable: the amount of money spent on candy
- How does the median height of teenage males compare to that of females?
  Grouping variable: gender (male, female)
  Variable: height
- How do the average temperatures of Los Angeles, Las Vegas, and San Francisco compare?
  Grouping variable: city (Los Angeles, Las Vegas, San Francisco)
  Variable: daily maximum temperature

Remember, a statistical investigative question is one that anticipates variability in the question, then addresses the variability in the answer.

Based on the campaign data you chose (*Food Habits* or *Personality Colors)*, you need to:

1. Write down your question and think about ways you could answer it using RStudio.
2. Describe the data you are using to answer your question and explain why it is appropriate.
3. Analyze the data to provide evidence that supports the answer to your question. Include plot(s) and numerical summaries (mean, median, MAD, IQR, etc.) related to your plots.
4. Interpret the data to answer your statistical question. You should:
   a. Provide the plot(s) and numerical summaries related to your plot(s).
   b. Describe what the plot shows.
   c. Explain why you chose to make that particular plot(s) and the related numerical summaries.
   d. Explain how the plot and numerical summary answer your statistical question.
5. Write and submit a one-page report.