**Chapter 10 Written Assignment**

Your mad success means you were able to hire several new analysts from the University of Colorado’s School of Public Affairs!  Happily, these new hires are able to handle a lot of work so you can focus your statistical expertise on VIP clients.

One VIP client is John Shite, of the Swearing Institute.  John has made a very successful career demonstrate the positive benefits of #@$! Swearing.  Today he has some data he needs your expertise in analyzing. John has long believed that cursing can reduce pain and make it more tolerable and he’s got the data to test this idea. In his study, John asked each respondent to plunge a hand into brutally icy water and keep it there as long as the pain would allow. In one condition, the respondents repeated their favorite curse words while their hands were in the water. In the other condition, the same participants repeated a neutral word (e.g., rabbit, cotton, grass, asphalt) while their hand was in the water. The data he gathered are as follows:

**Amount of Time (in seconds) Hand Remained in Icy Water**

Respondent       Swear words       Neutral words

1.                                   84                                   59

2.                                 72                                     61

3.                                 52                                     47

4.                                80                                      60

5.                               46                                       35

6.                              117                                     92

7.                                69                                     53

8.                               37                                      30

9.                              51                                        54

10.                           73                                        61

Provide a quality and comprehensive report to John Shite about his research question. Be sure to answer if these data indicate a significant difference in pain tolerance between the two conditions. Use a two-tailed test with an α=.05. Be sure to provide descriptives, info about hypotheses, your conclusion and policy recommendations.