

This is your HOMEWORK.

Craik and Lockhart (1972) proposed a model of memory that said the degree to which verbal material is remembered by the subject is a function of the degree to which it was processed when it was initially presented. To test this model, a researcher randomly assigned 50 subjects between the ages 21 and 25 to one of five groups: four incidental learning groups (without the expectation that the material will need to be recalled later) and one intentional-learning group. The **Counting** group was asked to read through a list of words and simply count the number of letters in each word. This involved the lowest level of processing, since subjects did not need to deal with each word as anything more than a collection of letters. The **Rhyming** group was asked to read each word and to think of a word that rhymed with it. This task involved considering the sound of each word but not its meaning. The **Adjective** group had to process the words to the extent of giving an adjective that could reasonably be used to modify each word on the list. The **Imagery** group was instructed to try to form vivid images of each word, and this condition was assumed to require the deepest level of processing. None of these four groups was told they would later be asked to recall the items. Finally, the **Intentional** group was told to read through the list and to memorize the words for later recall. After each subject had gone through the list of 27 items three times they were given a sheet of paper and asked to write down all the words they could remember. The data, which represent the number of words the subjects could remember, are presented below:

Counting	Rhyming	Adjective	Imagery	Intentional
8	10	14	20	21
6	7	11	16	19
4	8	18	16	17
6	10	14	15	15
7	4	13	18	22
6	7	15	16	16
5	10	17	20	22
7	6	16	22	22
9	7	12	14	18
7	7	11	19	21

- (1) Run descriptive statistics for the data (just like you did for Excel homework #1). Based on this information and what you know about the data, have you met the assumptions for a one-way ANOVA? *Be specific about each assumption, and how you know if it has been met.*
- (2) Regardless of your results in #1 (remember that the ANOVA is robust against minor violations of any assumption), do a one-way ANOVA. Remember that Excel calls this test "ANOVA: single factor."
- (3) Based on your results in #2, what can you conclude about the different memory strategies?
- (4) Graph your results. Be sure to include a title, labels for both axes, and labels for each

- (4) Graph your results. Be sure to include a title, labels for both axes, and labels for each point. Does your graph correspond to your findings in #2? *Be sure to do a line graph as described in the tutorial.*

BE SURE TO TURN IN ALL OF THE FOLLOWING:

- A printout of your descriptive statistics
- A print out of your one-way ANOVA
- A printout of your line graph
- Answers for questions #1, #3, and #4