**Peer Review Exercise**

You have been given six writing samples from your peers, three from a separation activity, described below, and three from the density lab. Let’s take a look at what the authors did correctly, or could improve upon.

For the Density Lab (Density 1-3), the instructor asked students to write an abstract based on the following directions

“…abstracts include a brief summary of an introduction to why the experiment was performed, the experiment protocol, the most important findings, and conclusions.  An abstract should be no more than 6-7 sentences.”

Writing Sample 1 (Density\_1)

1. What about this writing sample stands out to you? (This could be good or bad.)
2. Determine if the author followed the directions given on Blackboard. If not, what is missing?
3. Rewrite the abstract and fill in any data that is missing. (It’s OK to make up values for this exercise, but never for an experiment!)

Writing Sample 2 (Density\_2)

1. What about this writing sample stands out to you? (This could be good or bad.)
2. Determine if the author followed the directions given on Blackboard. If not, what is missing?
3. Rewrite the abstract and fill in any data that is missing. (It’s OK to make up values for this exercise, but never for an experiment!)

Writing Sample 3 (Density\_3)

1. What about this writing sample stands out to you? (This could be good or bad.)
2. Determine if the author followed the directions given on Blackboard. If not, what is missing?
3. Rewrite the abstract and fill in any data that is missing. (It’s OK to make up values for this exercise, but never for an experiment!)

The Separation Activity consists of students being given a mixture of table salt, sand and magnetic dust. The students are to develop an experiment to separate each component of the mixture and determine the mass percent of each item.

In this activity (Separation 1-3), the instructor asked students to provide the procedure employed in their separation, tabulate the data, and provide a discussion about the data and procedure.

Although you may not have performed this activity yourself, you are being asked to evaluate the writing of your peers.

Writing Sample 1 (Separation\_1)

1. What about this writing sample stands out to you? (This could be good or bad.)
2. Determine if you could repeat the given procedure. If, not what could be improved? What information or methods are missing?
3. In the Data/Results section, what has the author done correctly? What is missing? What could be improved?
4. The Discussion section is oftentimes combined with the Results, such that the authors can present the results of the experiment and discuss their meaning at the same time – plus, it saves space. The instructor gave the following guidance as to what to include in the Discussion section:

“Theoretically you should have been able to separate each of the components and collect 100% of the initial sample. However, to do this is very difficult, if not impossible. Discuss the parts of the experiment that caused errors – where did you lose some of the sample? Why doesn’t the sum of the individual components equal the mass of the initial sample?”

Has the author answered each of these questions? Has the author included any thought to how they would have changed the procedure?

1. Evaluate the following portion of the Discussion Section:

“The masses continuously seemed to work to our favor, but when the salt and the sand were being separated, some of the sand became fused into the filter paper and some of the remaining salt that was stuck to the beaker was unable to be obtained. Because of this, it was originally thought that our percent recovery would be less than 100%; however, the percent composition was in excess, at 116.7%. This extra percent recovery might be due to excess water from attempting to separate the salt from the sand. Perhaps not all the water completely evaporated.”

Does the author’s conclusion regarding the percent composition make sense? Explain. Explain what additional steps could be performed to test this hypothesis.

Writing Sample 2 (Separation\_2)

1. What about this writing sample stands out to you? (This could be good or bad.)
2. Determine if you could repeat the given procedure. If, not what could be improved? What information or methods are missing?
3. What is wrong with the data table? What should the author have done instead?
4. Determine if the Discussion is sufficient? What about the discussion stands out to you most? What can the author do to improve the discussion?

Writing Sample 3 (Separation\_3)

1. What about this writing sample stands out to you? (This could be good or bad.)
2. Determine if you could repeat the given procedure. If, not what could be improved? What information or methods are missing?
3. Evaluate the Discussion. What misconception(s) are used in the Discussion?
4. Revise the Discussion based on your answers to #3.