Problem Statement
Complete the following exercises, typing your answers in a well-formatted Microsoft Word document. Use phrasing that is appropriate for a laboratory report (i.e. do not use “I”).

Instructions
1. Choose the appropriate word:

The acid (affected/effected) the sample as expected.

2. Revise the following using bullets:

We recommend that more work on heat-exchanger performance be done with a larger variety of different fuels at the same temperature, with similar fuels at different temperatures, and with special fuels such as diesel fuel and shale-oil-derived fuels.

3. Create a transition sentence for the beginning of the second paragraph to help connect it to the first paragraph:

Wind energy has been used through windmills for at least 3000 years to process grain, pump water, etc. The use of windmills expanded in the late 19th century to generating electricity. In 1888 in Cleveland, OH, Charles F. Brush became the first in the United States to use wind power to generate electricity. Brush’s 12kW windmill had 144 blades and operated for 20 years.

Oil prices rose in 1973 causing the government to sponsor research and development programs in wind energy thereby increasing the interest in this form of renewable energy for the first time. However, when oil prices dropped again the interest in wind energy decreased as well. Due to current rising energy demands, finite fossil fuel supposed, and environmental concerns, the desire for renewable energy has increased again. Despite this, the United States generates less than 2% of its electricity from wind energy whereas Denmark leads the world with 20% of its electricity from wind power.
4. Circle the transition word to fill in the blank in the sentence to best explain the situation:

Situation:
- You took data for 10 minutes.
- The first 4 minutes had an equipment malfunction.
- You are only going to present the results from the last 6 minutes.

Sentence:
While 10 minutes of data were collected, an equipment malfunction caused the first 4 minutes to be inaccurate and unreliable. ____________, the results shown in this section only contain the last 6 minutes of the experiment.

A. Therefore  B. However  C. Whereas  D. Although  E. Furthermore

5. Revise the following to eliminate an overly long sentence:

The construction of the new facility is scheduled to begin in March, but it might be delayed by one or even two months by winter weather conditions, which can make it impossible to begin excavating the foundation.

6. Improve the focus of the following sentences:

The use of this method would eliminate the problem of motor damage.

The presence of a six-membered lactone ring was detected.

There is no alternative for us except to withdraw the product.

It is hoped that testing the evaluation copies of the software will help us make the decision.

Each preparation of the solution is done twice.

Consideration should be given to an acquisition of the properties.

7. Place the following in parallel structure:

Our present system is costing us profits and reduces our productivity.

The compositor should follow the printed directions; do not change the originator's work.
8. Identify the qualitative components in the following sentences and rewrite them quantitatively, using "X" to replace any necessary values.

The experimental stresses were close to the theoretical stresses.

The measurements exhibited high variability.

The tomatoes that had been exposed to fertilizer were very large.

9. Write a purpose statement for the following experiment.

The students will wire a series of transformers in two simulations of a power distribution grid. They will then find the voltage and current measurements at each station, calculating and noting any losses in power. In doing so, the students will learn about the power losses at each stage and identify which stage results in the highest power losses.

10. Using the purpose you wrote in (10) and the data from the table below, write an appropriate conclusion.

<table>
<thead>
<tr>
<th></th>
<th>Station 1</th>
<th>Station 2</th>
<th>Station 3</th>
<th>Station 4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simulation 1</td>
<td>2%</td>
<td>6%</td>
<td>4%</td>
<td>8%</td>
<td>21%</td>
</tr>
<tr>
<td>Simulation 2</td>
<td>3%</td>
<td>5%</td>
<td>5%</td>
<td>9%</td>
<td>23%</td>
</tr>
</tbody>
</table>

Document
- Turn in Word document