Iona Prep Physics Lab Exercise

Problem: To determine how much work is done turning a popper inside out.

The poppers we will use (not to be confused with recreational pharmaceuticals) are rubber shells which are approximately hemispherical and look like this:

After you turn them inside out they look like this:

Your job is to determine how much work has to be done in order to turn a popper inside out. There is more than one correct way to proceed.

You decide how to proceed and you request equipment from the instructor.

Lab Write up:

1. List of equipment used.
2. Diagram
3. Procedure: You explain what you did in enough detail that a student from another class could use your procedure as a set of instructions in order to repeat the experiment. (It should be written in the past tense).
4. Data: Record your data in an appropriate chart. Do not forget units. It is important that you include the number written on the inside of the popper you used. They are not necessarily uniform.
5. Conclusion: Use your data to determine how much work was done turning the popper inside out. "It took ...Joules of work to turn the popper inside out."
6. Comment on sources of error.