Complete Conclusion Example

For Part 1 of the experiment, we measured the length, height, diameter, and circumference of objects using a metric ruler and meter stick. We then measured the volume of various objects and substances using beakers and graduated cylinders. *For the length experiment, we had to figure out which measuring tool was the best to use and we had to measure carefully to minimize our errors. When measuring volume, we had to be careful to read the meniscus (curved surface of the liquid) properly. The volume of water in the plastic cup was the hardest, as we had to take two measurements and add them together.* My Hypothesis was correct, since the graduated cylinder gave us the most accurate volume measurements. It has markings for every milliliter instead of every 25 milliliters for the beaker, leading to very accurate measurements.

We had some problems figuring out how to measure the circumference of objects. It took us a while to figure out that we needed to wrap the piece of string around the object and measure the string's length using the ruler. We also had a hard time figuring out the volume of water in the cup. It wouldn't all fit in the graduated cylinder. We figured out that we had to measure part of it, pour that out, measure the other part, and add to the two measurements together. One **unavoidable error** we had is that the ruler is only accurate to the closest 0.1cm. Some of our measurements were in between two of the marks, so we had to pick the closest measurement. Another unavoidable error was that the beaker only gave us approximate volumes, as it said directly on the beaker. The graduated cylinder was much more accurate, but our volume measurements still could have been off by 1mL higher or lower than the real measurement. *In this experiment, I learned that it is very important to measure accurately, especially for small objects. I also learned that double or triple checking measurements can help avoid errors. Finally, I learned that sometimes our group needs to work together and take some time to figure out how to do the steps properly.*