PAPER TOWEL LAB

Name: _____ Date: _____ Period: _____

I. Key Question: Which paper towel absorbs the most water?

II. Hypothesis: Make an educated guess about the relationship between the brand of paper towel and how much water it will soak up, state as an IF... THEN... statement:

_____

_____

_____

III. Test the hypothesis: Follow the procedures below to test your hypothesis.

1. Measure and cut paper towels into 4 equal strips; (28 cm by 5 cm),
2. From a 250 ml beaker, measure 50 ml into a graduated cylinder. Pour into a 100 ml beaker.
3. Submerge a strip of paper towel into the 100 ml beaker, allow time to absorb water.
4. Remove paper towel strip and let excess water drip back into the 100 ml beaker for 10 seconds.
5. Discard the paper towel strip into the plastic beaker,
6. Pour the remaining water in the 100 ml beaker back into the graduated cylinder, subtract the value from the original 50 ml and record in the table below.
7. Repeat steps 2. - 6. For the rest of the strips, calculate the Best Value (BV), Uncertainty (U), and range of acceptable values, range = BV ± U.

Record Data: Using this table to record the amount of water absorbed

Trial	Paper towel A	Paper towel B	Paper towel C
1			
2			
3			
4			
Best Value (BV)			
Uncertainty (U)			

Complete the following statements for each paper towel.

"For paper towel A, the best value is _____ ml with an uncertainty of _____. This means that the true value for paper towel A is within the range of _____ ml and _____ ml."

"For paper towel B, the best value is _____ ml with an uncertainty of _____. This means that the true value for paper towel B is within the range of _____ ml and _____ ml."

"For paper towel C, the best value is _____ ml with an uncertainty of _____. This means that the true value for paper towel C is within the range of _____ ml and _____ ml."

IV. Analyze Data: Graph the results of your experiment using a bar graph. Remember to label the graph, the manipulated variable (the one you changed) is along the bottom, the responding variable (measured) is along the side.

V. Conclusions: Which paper towel absorbed the most water? _____

Was your hypothesis correct? _____

Would buying the most absorbent paper towel always be the best option? _____

_____

_____

What could be other considerations when buying paper towels? _____

_____

_____

_____

_____