

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

## IPC SCIENTIFIC METHOD – TOILET PAPER LAB

**PROBLEM:** Which toilet paper has the greatest strength when wet?

**HYPOTHESIS:** \_\_\_\_\_  
\_\_\_\_\_

**MATERIALS:** Toilet Paper Squares – 4 Brands – 3 Squares of each Brand,  
4 Rubber Bands, Water, Pipet or Straw, Pennies and 100 mL Beaker

- PROCEDURE:**
1. Place 1 sheet of toilet paper A (record brand and any observations about the sample in the data table) over the top of the beaker. Use the rubber band to firmly hold the toilet paper tight like a drumhead around the beaker.
  2. Use the pipet or straw to add EXACTLY 3 drops of water to the center of the toilet paper square. (Note: The key here is to be consistent by adding the same number of drops of water to the toilet paper sample each time.) Wait 10 seconds to allow the water to spread.
  3. GENTLY place the pennies onto the center of the toilet paper, one at a time. Stop as soon as the paper breaks. Do NOT drip the pennies on the paper.
  4. Count the pennies that fell into the beaker. Record this number in the data table section. Collect the pennies for reuse with the other squares.
  5. Repeat the above steps two more times with the remaining two squares of the same brand of toilet paper and record the number of dropped pennies.
  6. After completion of the first brand, repeat the above steps with the remaining brands of toilet paper to be tested. Make sure that you bring only 1 brand at a time, so the data won't be compromised.

**OBSERVATIONS / DATA TABLE:**

TOILET PAPER BRAND	OBSERVATIONS	# OF PENNIES THAT FELL INTO THE BEAKER			
		TRIAL 1	TRIAL 2	TRIAL 3	AVERAGE

**QUESTIONS:**

1. In this experiment, name the following:

Controlled Variables:

Manipulative Variable:

Responding Variable:

2. According to your experiment, which toilet paper held the most pennies?

**CONCLUSION:** Based on your observations in this lab, re-answer the original hypothesis by accepting, rejecting or revising the one you made before conducting this experiment.

GRAPH: Create a bar graph of the average number of pennies for each brand of toilet paper.

What is the INDEPENDENT variable?

What is the DEPENDENT variable?