

Paper Towel Testing

- Age Level:
 - Juniors and Cadettes
- Paper Towel Testing is a series of activities in which your students design and conduct scientific tests to compare the qualities of several brands of paper towels. Your girls utilize the general methods common to all scientific investigation as they design and conduct controlled experiments, measure physical characteristic, record their results, and draw conclusions. They also apply mathematics as they compare factors such as wet strength, absorbency, and unit cost of different brands.
- Session 1: Conducting Experiments
 - Intro to scientific experimentation, including the concepts of experimenter bias and fair test. The girls work in teams, planning and conducting experiments to determine which brand of paper towel is the most absorbent and which has the greatest wet strength.
- Session 2: Discussing Results and Planning Follow-up Experiments
 - Post the results of each group's experiment and discuss the similarities and differences of the findings. Discrepant results present an ideal opportunity to introduce the concept of controlling variables. Girls discuss which variables could be better controlled and plan follow-up experiments.
- Session 3: Conducting Follow-up Experiments
 - Girls describe the experiments they have planned and point out the variables they will control. Now the girls conduct their experiments, discuss the results, and calculate the average points awarded for each brand of paper towels.
- Session 4: Which Brand is the Best Buy?
 - Girls are given information about cost per roll of paper towels and number of sheets per roll. They are asked to calculate cost per sheet of paper towel. Now that they have additional information about each brand of paper towel, your girls will reexamine the results of their tests and discuss which brand they think is the best buy.