

# CALIFORNIA STATE SCIENCE FAIR 2005 PROJECT SUMMARY

Name(s)

Case B. Walker

**Project Number** 

**J1133** 

## **Project Title**

# Which Paper Towel Gives You the Most Bang for Your Buck?

#### **Abstract**

# **Objectives/Goals**

My project was designed to test whether higher cost in paper towels meant higher quality or not.

#### Methods/Materials

To test absorbency, I put a paper towel into a 6-inch plastic embroidery hoop and put it on a clear bucket so that only the plastic hoop was touching the bucket. Then I dropped one drop of water at a time into the center of the paper towel, at about one per second. When one drop dripped out the bottom of the paper towel, I would stop counting and record my data. I did this for three times per brand.

To test strength, I would take the wet paper towel that was wet enough to drop one drop of water or more out of the bottom, and put penny after penny into the center of the paper towel until the paper towel ripped and pennies spilled out the bottom. I then recorded my data and repeated twice more.

Materials-

- 1. Nine different brands of paper towels from a standard supermarket
- 2.A dropper
- 3.Water
- 4.Pennies
- 5.Plastic embroidery hoop
- 6.Clear tub with the bottom cut out
- 7.Recording sheets and writing instruments

#### **Results**

At the three cheapest, Slim Price, Earth First, and Vons, my hypothesis fit perfectly. Most of the medium priced paper towels also followed my hypothesis. But the best paper towel, Thirsty, was very inexpensive, and the most expensive paper towel, Viva, was shown as not that good.

### **Conclusions/Discussion**

The paper towels in the study, although don#t follow my hypothesis exactly, mainly follow my hypothesis. It is mostly only two of the paper towels that are wacky. The best performing paper towel is in the low-medium price range and the most expensive paper towel is medium quality.

## **Summary Statement**

I used two tests on nine paper towel brands to determine the quality, then compared the results to the costs.

## **Help Received**

Mom helped getting supplies, typing, and cutting and glueing; Dad cut out the bottom of a clear plastic tub.