

# CALIFORNIA STATE SCIENCE FAIR 2006 PROJECT SUMMARY

Name(s)

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**Project Number** 

J0511

## **Project Title**

# **Investigating the Effect of Different Solutions on the Elasticity of Various Fabrics**

## **Objectives/Goals**

## **Abstract**

To find out which type of detergent will weaken the fabric and cause the fabric to he point that it can't turn back to it's normal size. the other reason is to find out which detergent has the most effect on the fabrics.

The fabrics are in being stretched and measured to see which detergent has the most effect.

#### Methods/Materials

The materials are 5 pieces of nylon, lycra, cotton, and polyester. 1 bottle of bleach and 1 bottle of ammonia. 1 box of salt and 1 box of baking soda. 5 jars and 10 cups of water. 2 long poles and 2 sawhorse stands. 1 ruler measured in cm and a sewing machine. 1 marker and 1 teaspoon. 2 25 pound weights and a pair of rubber gloves. A timer and 1 thermometer.

#### **Results**

The reasults were that the bleach weakened the fabric and caused it to lose it's elasticity the most and then the second detergent was the ammonia that caused the fabric to weaken on lose most of it's elasticity.

#### **Conclusions/Discussion**

What I learned from this project is that the bleach caused the fabric to lose most of its elasticity and that it's better to wash clothing with bleach but only white clotheing.

## **Summary Statement**

To find out which detergent weakens the fabric's elasticity.

## Help Received

Moher helped get fabrics; Father helped get pole and stand.