CALIFORNIA STATE SCIENCE FAIR
2003 PROJECT SUMMARY

Name(s)
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Project Number
J1116

Project Title
Flaming Fabrics: Which Material Burns Fastest?

Abstract

Objectives/Goals
My project is an experiment to see how quickly different materials burn and how they burn.

Methods/Materials
After doing research I found eleven different types of fabrics. I cut each on into 3 5x15cm strips. I then took tongs and matches and lit each strip three times and timed how long it took to burn. I repeated this until all materials were tested. Safety precautions included Adult supervision, fire extinguisher and water.

Results
The loose weave dress burned the quickest. I believe that it would burn the quickest because the loose weave would let the flame have more oxygen. The Nomex shirt did not burn at all.

Conclusions/Discussion
My conclusion is that fabrics with a looser weave will burn a lot quicker than one with a really tight weave. This shows that the cost of materials such as Nomex may be a lot more than regular pants, but the Nomex is a lot safer.

Summary Statement
This is an expeiment about which clothing material will burn the fastest?

Help Received
Parental supervision during the experiment dealing with fire.