

CALIFORNIA STATE SCIENCE FAIR 2014 PROJECT SUMMARY

Name(s)

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Project Number

J1329

Project Title

The Effect of Fabric Content on Heat Absorption

Abstract

Objectives/Goals

The main objective of this science project was to find out how fabric content might have an effect on heat absorption of different fabrics.

Methods/Materials

Six fabrics were used, each made of a different content. They were cotton, linen, silk, rayon, polyester and a cotton-polyester blend. An ice cube was weighed, then covered with a fabric square and placed under a 100 watt heat lamp for ten minutes. Then the cube was weighed again and the percentage melted was calculated for each fabric content.

Results

The results showed that cotton fabric absorbed the least amount of heat. The synthetic fabric, polyester, absorbed the most heat.

Conclusions/Discussion

This information about fabric content and heat absorption could be useful in choosing clothing for comfort in different seasons. It was clearly shown that natural fibers absorb less heat than artificial or synthetic fibers.

Summary Statement

This project tested natural and synthetic fibers to see how much heat they absorb.

Help Received

Grandmother provided recources.