

CALIFORNIA STATE SCIENCE FAIR 2007 PROJECT SUMMARY

Name(s)

Rachele M. Lazo

Project Number

J0598

Project Title

How Does the Number of Marshmallows Burned under a Container of Water Affect the Change in the Water's Temperature?

Objectives/Goals

Abstract

My project was to determine the effect of the number of marshmallows being burned under under a container of water to the change in the water's temperature.

Methods/Materials

Different numbers of marshmallows were burned. One, two, and three marshamallows were tested. Each number of marshmallows was tested five times. The change in temperature for the water was measured in degrees Celsius using a thermometer.

Results

In this experiment, as the number of marshamllows burned under a container of water increased, the change in the water's temperature increased. When the number of marshamllows was increased from one to two to three, the change in the water's temperature increased from 3.6 to 6.6 to 9.4 degrees Celsius.

Conclusions/Discussion

My conclusion is that the more marshamllows being burned under a container of water, the greater change in the water's temperature. This is due to a reaction. The more marshamllows being burned under a container of water means there are more calories being burned. The more calories in the marshamllows means there are more chemical energy. When the marshamllow is burned, its chemical energy is converted ito heat energy. This heat is what is used to raise the temperature of the water. The more heat that is produced leads to a greater temperature change.

Summary Statement

This project investigates the relationship between the number of marshmallows burned under a container of water and the change in the water's temperature.

Help Received

Teacher loaned some materials; Parents took pictures while doing project; Teacher looked over drafts of report.