CALIFORNIA STATE SCIENCE FAIR
2016 PROJECT SUMMARY

Name(s)

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Project Number

36118

Project Title

Using Ice to Determine the Efficiency of Basic Types of Salt

Abstract

Objectives/Goals

The objective of this study is to find out what type of basic salt melts ice the fastest.

Methods/Materials

The materials used were a scale to weigh the salt (30 grams), table salt (Morton Iodized Salt), sea salt (Hain Pure Foods Sea Salt), kosher salt (Morton Coarse Kosher Salt), tray to make ice cubes, container to place four cubes, and a stopwatch.

Results

The time was the dependent variable because it was affected by the independent variable (salt). The average time for each type of basic salt was recorded. Kosher salt was the most efficient when melting the ice.

Conclusions/Discussion

After several trials, the average time to melt ice indicated that kosher salt had a faster reaction with the ice than the other salts. The time it took for the ice cubes with no salt to melt was significantly longer than the ice cubes with salt because they weren't reacting with any chemicals. The deviations noted, show that there weren't significant differences between the averages for table salt and sea salt. However, it was concluded that kosher salt was the most efficient because it was the purest salt meaning that it didn't have any additives.

Summary Statement

After recording the average time for each different type of basic salt to melt ice, it was noted that kosher salt was the most efficient since it was the purest salt.

Help Received

My biology teacher helped me throughout the process revising the methods and results.

Preliminary