CALIFORNIA STATE SCIENCE FAIR
2004 PROJECT SUMMARY

Name(s)
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Project Number
J1126

Project Title
Quality of Packing Material

Abstract

Objectives/Goals
My objective was to study, test and determine the quality of packing materials to best protect fragile merchandise when shipping. My hypothesis was that the plactic bubble wrap would provide the best protection.

Methods/Materials
Raw eggs were packaged in three types of packing materials in three equal size and strength boxes. The packing materials used were: foam peanuts, plastic buble wrap, and newspaper. Each box was dropped from heights beginning at three feet, extending up to fifteen feet (at two foot intervals) until each egg was broken.

Results
The egg wrapped in plastic bubble wrap broke at three feet, the egg in newspaper broke at seven feet, and the egg packaged in foam peanuts broke at fifteen feet.

Conclusions/Discussion
Although my hypothesis was that the plastic bubble wrap would be the best protection, the outcome indicated that the best protection for fragile items is the use of foam peanuts.

Summary Statement
To determine which packing material will best protect fragile items when shipped.

Help Received
My mother helped type the report and my mother and sister assisted in the experimentation.