

CALIFORNIA STATE SCIENCE FAIR 2007 PROJECT SUMMARY

Name(s)

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Project Number

J1617

Project Title

Albedo

Abstract

Objectives/Goals

My objective was to find out the effect of albedo as it relates to global warming.

Methods/Materials

Experiment 1

- 1) 6 354 ml plastic bowls (not white)
- 2) 6 pool thermometers
- 3) 6 pieces of mesh 10cm x 20cm
- 4) 1 timer
- 5) 1 glue gun / glue sticks
- 6) 1 pair of scissors
- 7) 15 2.5cm x 1.5cm white crystals.
- 8) 15 2.5cm x 2.5cm squares of white foam
- 9) 15 2.5cm x 2.5cm white corrugated paper squares
- 10) 180 1cm white beads (increments of 12)
- 11) 60 1cm white cotton puffs (increments of 5)
- 12) 12 liters of water
- 13) 1 light source

Experiments 2, 3 & 4

The same materials were used for experiments 2, 3, and 4 with the exception of the clear Mylar which was not used in experiment 2 at all nor experiment 3, trials 1 and 2. The amounts of the materials vary in each experiment and are noted in the procedures.

- 1) 3 3.8 litters refrigerated water
- 2) 20 400 ml. clear glass bowls
- 3) 20 thermometers
- 4) 1 30 cm. square yellow Mylar
- 5) 1 30 cm. square green Mylar
- 6) 1 30 cm. square blue Mylar
- 7) 1 30 cm. square clear Mylar
- 8) 1 pen
- 9) 1 pair of scissors
- 10) 1 single edge razor blade

Summary Statement

This project is about the effects of albedo on global warming.

Help Received

Mother purchased all supplies and helped with board; Professor Arey gave me initial idea; My science teacher provided thermometers.