**Name(s)**  
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**Project Number**  
J1526

### Project Title

What Is the Effect of Various Window Coverings on the Temperature of the Enclosed Area?

### Objectives/Goals

The purpose of my project is to discover which of the most commonly used window coverings keeps heat out of a house the best. I believe that a reflective window covering will succeed in keeping out the heat.

### Methods/Materials

I used a dual pane window fitted in a frame of plywood. I then insulated the frame with fiberglass insulation and dry walled the inside. I also covered the outside with T111 wood covering. I tested each of the different coverings: mini blinds, window shade, aluminum foil, reflective and non-reflective window films, and tested with no covering for a control. I used two 250-watt heat lamps mounted on a stand to simulate the sun. I tested each covering three times.

### Results

I found out that the aluminum foil did the best at keeping the heat out, although reflective window film consistently was second best at keeping the interior cooler.

### Conclusions/Discussion

I concluded that if you can just reflect the light away from your house, the interior of your home would stay cooler.

### Summary Statement

The object of my project was to figure out which window covering would keep the most heat out of a house.

### Help Received

My father helped me build the house.