



**CALIFORNIA STATE SCIENCE FAIR  
2002 PROJECT SUMMARY**

<b>Name(s)</b> Michael T. Mackey	<b>Project Number</b>  22320
<b>Project Title</b> Ice in Time	
<b>Objectives/Goals</b> Find what type of insulation will make an ice cube last longer. <b>Abstract</b> <b>Methods/Materials</b> 1. Buy materials: ice tray, 1/8 measuring cup, water, rubber foam insulation, fiberglass and plastic insulation (3#wide x 1/2# thick), 100% cotton towel, foil and fiberglass (12X2# thick), plates, camera, scissors, tape measure, clear tape and timer. 2. Measure 1/8 cup water 3. Pour water into each ice pocket in ice tray 4. freeze ice tray with water for 24 hours 5. cut each material used large enough to cover an ice cube 6. take out ice tray 7. remove cubes from the ice tray 8. place one ice cube in each insulation material 9. set timer for 30 minutes to check 10. record date every 30 minutes <b>Results</b> Insulation of any kind make ice cubes last longer. The foil tape made my ice cubes last the longest. <b>Conclusions/Discussion</b> An ice cube melts quickly without insulation. We all know that. I discovered that when you add any kind of insulation to an ice cube it takes longer to melt down. How long it takes to melt is determined by the type of insulation you use. If you want ice cubes to last longer you must insulate them against the air. I learned that even paper can help an ice cube last longer. I would never have guessed that. The very best insulation that I discovered was a rubber form tube. It kept the ice cube cold for eleven hours. I'm certain that if I continued to try other kinds of insulation I could find something that would keep an ice cube cold longer than eleven hours.	
<b>Summary Statement</b> Insulation of any type will make an ice cube last longer.	
<b>Help Received</b> Mom helped get the material and typed the report. My sister Lyndsi and Aunt Mitzi helped with the camera and listened for the timer.	