



**CALIFORNIA STATE SCIENCE FAIR  
2004 PROJECT SUMMARY**

<b>Name(s)</b> <b>Kimberly A. King</b>	<b>Project Number</b> <b>J1599</b>
<b>Project Title</b> <b>What Do Lasers Go Through?</b>	
<b>Abstract</b> <b>Objectives/Goals</b> The objective was to test red lasers with different items to see which items let red laser energy pass through. I thought that the clearer the item was the more energy would pass through. <b>Methods/Materials</b> Three different red lasers were used to test and calculate transmission through different materials. the transmission was measured with an energy detector and calculated with an in beam and out beam measurement. All the datta was then averaged for each item and then compared in a graph. <b>Results</b> Items such as water, canola oil and steam had very high transmission whereas ice, carbon dioxide gas and olive oil had much lower transmission. <b>Conclusions/Discussion</b> Darker liquids like olive oil, transmitted less than the lighter liquids such as water and canola oil. Clear plastic and glass allowed more energy to pass through than the darker plastics. This proves my hypothesis that clearer objects would have a higher transmission than darker objects.	
<b>Summary Statement</b> Will red lasersw transmit better through clear objects or darker ones?	
<b>Help Received</b> Dad got lasers, detector and carbon dioxide. Dad showed how to work the equipment.	