



California Science Center  
**CALIFORNIA STATE SCIENCE FAIR**  
**2001 PROJECT SUMMARY**

<b>Your Name</b> (List all student names if multiple authors.) <b>Katie E. Ressmeyer</b>	<b>Science Fair Use Only</b>  <h1 style="margin: 0;">J1029</h1>
<b>Project Title</b> (Limit: 120 characters. Those beyond 120 will be ignored. See pg. 9) <b>How Are Black and White Films Affected by Color Contrast?</b>	<b>Division</b> <input checked="" type="checkbox"/> <b>Junior (6-8)</b> <input type="checkbox"/> <b>Senior (9-12)</b>
<b>Preferred Category</b> (See page 5 for descriptions.) <b>10 - Materials Science</b>	
<b>Abstract</b> (Include Objective, Methods, Results, Conclusion. See samples on page 14.) Use no attachments. Only text inside these boxes will be used for category assignment or given to your judges.	
<p>In this experiment the experimenter asked, "How does the brand of black and white film affect the color contrast?" In the hypothesis, the experimenter stated that the most expensive brand of film would provide the most color contrast. The experimenter also stated that the film printed on fine grain paper will have more color contrast because it will be clearer. The procedure for the experiment was as follows:</p> <ol style="list-style-type: none"> <li>1. Set up the area with a table and prepare all the items.</li> <li>2. Take pictures with TMX 100, HP5+ 400, TX 400, TMY 400, Delta 400, T400 CN film. Take all 6 items pictures 4 times.</li> <li>3. Examine the pictures with the color wheel.</li> </ol> <p>The experimenter found that the TMY 400 had contrast from 10% of complete black to 90% of complete black. The Delta 400 had a contrast of 20% to 90%. 30% to 100% was the contrast for the T400 CN. The TX 400 had a contrast from 30% to 100% also. The HP5+ 400 had a contrast from 20% to 90%. The last brand of film was the TMX 100 which had a contrast from 20% to 90%.</p> <p>In conclusion, the TMY 400 had the largest contrast range out of all 6 brands of film. The TMY 400 had a contrast range of 80% and all the other brands of film had a contrast range of 70%. All of the films were very close in contrast.</p>	
<b>Summary Statement</b> (In one sentence, state what your project is about.) If different brands of film have a different color contrast.	
<b>Help Received in Doing Project</b> (e.g. Mother helped type report; Neighbor helped wire board; Used lab equipment at university X under the supervision of Dr. Y; Participant in NSF Young Scholars Program) See Display Regulation #8 on page 4.	