



**CALIFORNIA STATE SCIENCE FAIR
2010 PROJECT SUMMARY**

Name(s) Katherine A. Shewfelt	Project Number J2225
Project Title Oops, I Made a Mistake! Which Eraser Works Best?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The objective of my experiment was to determine by test which eraser performs the best.</p> <p>Methods/Materials I chose eight independent variables (erasers). I tested each ten times by erasing a pencil-filled 2.5 square cm. area. I filled in my squares by making 50 hard strokes. I tested the erasers over a three day period. I then compared my results to a computer generated gray-scale using PowerPoint.</p> <p>Results My results were that the standard pink eraser performed the best, and the cartoon eraser was the worst. The Japanese eraser was second best, close to the standard pink. There were few apparent trends in my erasing. For example, the erasers with rectangular shapes did well. This is probably because they have good grip.</p> <p>Conclusions/Discussion My hypothesis was if I test eraser types to see which erases best, then the Staedtler brand will provide the best results because its material grips well and does not smudge. My conclusion is that the pink standard eraser is best because it is easily gripped and is slightly abrasive. My other main conclusion is that sticky erasers work well. This is because they are high in rubber and pumice. I observed older erasers are of lower value because of their hard texture. My results will benefit society by revealing which erasers to buy. People will buy better erasers. Due to this, work quality and productivity will improve.</p>	
Summary Statement The purpose of my experiment was to test eight common pencil erasers to determine which performs best and why.	
Help Received Mother helped with stopwatch timing.	