



**CALIFORNIA STATE SCIENCE FAIR
2003 PROJECT SUMMARY**

Name(s) Stacy N. Smith	Project Number J1721
Project Title Add That Extra Stamp? How Accurate Is the Post Office in Weighing Mail?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals I wonder how accurate the Post Office is in weighing mail. I will send out about 75 letters weighing from 1.5 ounces to 3 ounces with only one 37 cent stamp each. If the Post Office weighing machines work right, all the letters I send will be returned for lack of postage. I believe that about 90% of the over weight letters I send will be returned. I expect about 10% of the letters I send out will get through because I doubt the machines will work perfectly.</p> <p>Methods/Materials I used the Post Office weight scales to find out how many sheets of paper plus an envelope it took to make up different weight letters ranging from 1.5 to 3.0 ounces. I wrote a note to include with the letters to explain my experiment, asking them to tell me if they had to pay postage to receive the letter. I used only one 37 cent stamp on each envelope. I sent out a total of 74 different envelopes on different days and locations throughout the city. I sent only one per location per day. I kept a log of the letters sent along with the results. I also called each person I sent a letter to, checking to see if they were asked to pay any lack of postage.</p> <p>Results I sent out a total of 74 "short postage" envelopes. Three were returned because of the wrong address. Four were returned for lack of postage; two 2.25oz and two 2.75oz Three arrived with postage due; one 1.75oz, one 2.25oz and one 2.75oz.</p> <p>64 envelopes were delivered successfully out of a possible 71 deliverable letters. - 9.9% of the over weight letters were caught by the Post Office - 90.1% of the over weight letters were delivered</p> <p>Conclusions/Discussion I am very surprised at the results of my experiment. I've learned that the Post Office is not accurate in weighing mail at all. I could not see any special pattern to why the few were caught over the others. I think that because the Post Office handles so many letters that they are partially hoping everyone will be honest when they use stamps. The U.S. Postal Consumer Affairs person suggested that the mail carriers may have paid the difference without charging the customers since many carriers know their clients well. I wonder...</p>	
Summary Statement By sending out letters ranging from 1.5 to 3.0 ounces with only one 37 cent stamp, I will find out how accurate the Post Office is in weighing the mail.	
Help Received My dad helped me with the graph	