



**CALIFORNIA STATE SCIENCE FAIR  
2002 PROJECT SUMMARY**

<b>Name(s)</b> Monica I. Larano	<b>Project Number</b>  22334
<b>Project Title</b> Pop! Go the Kernels	
<b>Objectives/Goals</b> The objective is to determine whether popcorn kernels stored in the freezer will yield more popcorn kernels than those stored in room temperature. <b>Abstract</b> <b>Methods/Materials</b> Three groups of popcorn kernels were tested. Each group consisted of 10 plastic bags with 200 kernels in each bag. The bags in the first group, the control group, were stored at room temperature in a cupboard. The second group was stored in the refrigerator, and the third was stored in the freezer. After 5 days, a hot air popper was used to pop the kernels. After a popping time of 3 minutes for each batch, the number of kernels that remained unpopped was counted, and the number of popped kernels was determined. The mean, the median and the mode for each group were calculated and graphed. <b>Results</b> Popcorn kernels stored in the freezer yielded fewer popped kernels than those stored in the refrigerator or at room temperature. Popcorn kernels stored at room temperature yielded the most popped kernels. <b>Conclusions/Discussion</b> Popcorn stored in refrigerators or freezers can dry out quickly. Since the moisture in the popcorn causes the kernels to pop, then the drying effect of storage in the refrigerator or freezer results in fewer popped kernels as compared to those stored at room temperature.	
<b>Summary Statement</b> The project is about the effect of freezing popcorn on the number of popped kernels.	
<b>Help Received</b> Father taught me how to use Excel to graph results.	