

CALIFORNIA STATE SCIENCE FAIR 2005 PROJECT SUMMARY

Name(s) **Project Number** Landon H. Aaker **J1201 Project Title Standard Deviation Comparisons of Population Sizes** Abstract **Objectives/Goals** I am trying to determine how large a survey sample must be to get an accurate representation of a whole population. Methods/Materials I rolled a dice 600 times and recorded it then plugged in different sizes of samples of the population into an equation to determine the standard deviation. Results 15% of the whole population will give you an accurate representation. Conclusions/Discussion The smallest sample required for reliable results is 15% of the whole population. **Summary Statement** I am trying to determine statistically how large a survey sample must be to get an accurate representation of a whole population. Help Received