



**CALIFORNIA STATE SCIENCE FAIR
2015 PROJECT SUMMARY**

Name(s) Olivia Z. Boles	Project Number 35161
Project Title Bacteria, Bacteria Go Away!	
Abstract Objectives/Goals The objective of this project was to determine if disinfectant wipes effectively removed harmful bacteria on common surfaces. Methods/Materials The methods included swathing the same surface, in the same manner, then with the same motion, wiping the swab on agar gel. Material were: 20 petri dishes, agar mixture, water (to be mixed with agar to make gel), 5 middle school athletics volleyballs, 5 middle school athletics basketballs, 5 middle school owned iPads, 5 middle school owned computer keyboards, 40 sterile swabs, 20 Clorox brand disinfectant wipes. Results This experiment was conceived to test bacteria growth after use of disinfectant wipes on common surfaces. The experiment proved that disinfectant wipes kill only 12.1875% of bacteria on common surfaces. Conclusions/Discussion Disinfectant wipes do help kill bacteria, but not the marketed 99.9%. The hypothesis is supported in the findings: if items commonly found in middle schools are swathed for bacteria, wiped with a disinfectant wipe and then swathed for bacteria again, there will be less bacterial growth. This project could lead to other work, such as testing other wipes, disinfectant sprays, etc to find out which brand or method is the most effective.	
Summary Statement Using common objects and surfaces, this experiment tested the efficacy of disinfectant wipes on bacterial growth.	
Help Received Mrs. Silverman, my science teacher, helped with boiling the agar gel. A fellow student helped in the labeling of petri dishes and in the swathing process.	