CALIFORNIA STATE SCIENCE FAIR
2013 PROJECT SUMMARY

Name(s)
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Project Number
J1602

Project Title
Germophobia

Abstract

Objectives/Goals
The problem with germs is that we can't see them with our eyes so it is hard to avoid contact. We share many things at school including germs.My experiment was to find which object at Holy Name School that we come in contact with is the "GERMIEST". I chose 5 different objects; the computer keyboard, classroom desk, boys' bathroom toilet handle, basketball in the gym and the school office telephone. I also expanded on last year's science project findings and experimented on real germs to see which of the two hand-cleaning agents (Hand Sanitizer with alcohol or Anti-Bacterial Soap) will kill more germs by applying them to the samples I collected. The purpose of my project is to help my family and friends to stay healthy, be protected and be aware of Germs. Germs spread when we pick up a germ and touch something else and someone else touches something and keeps spreading. If we are aware that germs are everywhere around us, it's helpful especially during the flu season to learn where we share the most germs.

Methods/Materials
1. Label all 16 Petri Dishes w/masking tape to identify the content. 2. Wipe the Petri Dish labeledw/Anti-bacteria Soap and Hand Sanitizer w/ Alcohol using a clean swab with theeach of the solutions indicated. Close the lid immediately after the solutionsis applied. 3. Collect specimen from thefrequently touched surface chosen. (Computer key board, classroom desk,Toilet Handle in bathroom, Basketball in Gym, telephone in school office). 4. Roll and rub them onto the Agar of each labeled PetriDish. 5. DisposeSwab after each use. 6. Tape around the Petri Dishto secure the lid to the Petri Dish with Agar. 7. Place all 16 Petri Dishesin box to keep dark and near the heater thermometer where room temperatureis steady at 74F. 8. Observe daily for 5 days and keep a logrecord and chart any changes of the Petri Dish with Germ samples collected. Iam looking for number of colony spot growing, changes in color, shape and sizes.

Results
My hypothesis was partially correct. First half was wrong; the school office telephone had the most amounts of bacteria instead of the boy#s bathroom toilet handle after 5 days. The second half, my experiment on real germs proved last year#s findings were true. Anti-bacteria soap is more effective on germs. The results show the importance of washing hands with anti-bacterial soap and germs are all around us.

Conclusions/Discussion
The results show the importance of washing hands with anti-bacterial soap and germs are all around us.

Summary Statement
What is the most germiest place at school and which cleaning agent is most effective to kill germs

Help Received
Mother helped ordering the mateiral online; My science teacher, Mrs. Miller gave me advice when the first two trials of collecting germs did not work.