**LAB #5: Planning Your Home Bacterial Control Experiment**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*You will be studying Microbial Control (killing microbes) by designing and carrying out an experiment outside of class. You will then turn in a lab report to present your results.*

***What do I need to do?***Think about how to design your experiment. Then discuss your plan with me to refine your experiment and determine which supplies you will need. Once you are home, do your experiment ASAP, since it will take a few days for your samples to yield results. Use the Scientific Paper Template to help you write up your results.

***What should I study?*** Ever wonder how well a disinfectant wipe sanitizes your cell phone? If cleaning your kitchen sink really kills germs? Does mopping eliminate bacteria from your floor? How can you effectively clean your baby’s toys? Does your dishwasher sanitize your dishes? There are so many questions you can ask. *Make this experiment personal. What are you interested in learning?*

1. What microbial control question would you like to answer?

2. Put this question in the form of a ***hypothesis***, an *if/then* prediction of what you expect to find. (*Here’s a silly general example of a* ***hypothesis***: ***If*** my dog Lulu sneaks downstairs, ***then*** I will find a puddle of piss somewhere in the basement.)

3. Write a very detailed, step-by-step description of your experimental design. Specifically, how will you carry out your experiment? Keep in mind that your design needs to be detailed enough so that someone else could read this and carry out the **EXACT** SAME EXPERIMENT. This will be the basis for the METHODS section of your report.