TITLE: Microbial Growth Lab
PURPOSE: to gain knowledge about the distribution and growth patterns of microorganisms
MATERIALS: petri dishes, nutrient agar, incubator, inoculating loops, miscellaneous items for inoculation, parafilm

PROCEDURE:
1. Divide your petri dish into 4 quadrants with a marker on the bottom half of the dish. Also, identify your dish with your initials so that you will recognize it after incubation.
2. Choose 4 objects you wish to inoculate your petri dish with and record their names in your data section under the appropriate quadrant.
3. Slowly lift the lid of the petri dish and briefly touch the object to the surface of the agar. If this is not possible, use your inoculating loop to transfer microbes from the surface of the object to the surface of the agar. CAUTION: do not dig into the soft surface of the agar.
4. Hold the lid of the petri dish directly above the dish to keep airborne particles from entering. Close the lid quickly after inoculation.
5. Seal the petri dish with a strip of parafilm.
6. Incubate your petri dish at 35-37° C. During incubation, the microbes that came off the objects you sampled will reproduce and form viable colonies.

DATA:
Objects sampled:
- Quadrant 1: ____________________________________________
- Quadrant 2: ____________________________________________
- Quadrant 3: ____________________________________________
- Quadrant 4: ____________________________________________

1. Did you find colonies in every section of your plate? ____________________
2. Which of the objects you chose produced the greatest number of colonies? ________________________________________________________________
3. Which of the objects you chose produced the fewest number of colonies? ________________________________________________________________
4. Which object sampled in your class produced the greatest growth? ________________________________________________________________
5. Did any growth seem to dominate the petri dish? _______ If so, which one? ________________________________________________________________
6. Did you notice any particular odor in your plate? _______ If so, describe: ________________________________________________________________
7. What color was the growth in your plate? _____________________________
8. Describe the shape and texture of the growths on your plate: ______________
9. Sketch your plate on the back of this paper, demonstrating the growth pattern of the colonies present.

CONCLUSION: Summarize what you have observed regarding the growth of microbes and where they may be found.