

Names: _____

Search and Seizure Activity

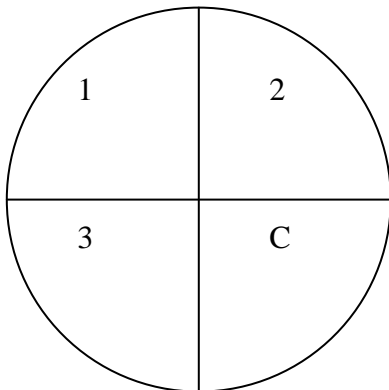
Purpose: To determine the most likely location around the LTHS building where bacterial growth can be observed.

Materials: Nutrient Agar (Petri dishes), marking pens, Q-Tips, 50 ml beaker, *parafilm*, paper towel, transparent tape, and incubator (37°C).

Procedure:

1. Obtain a petri dish containing nutrient agar
2. Using a permanent marker divide the dish in quarters and number 1-3 and C (control) on the **bottom on the plate**. (Agar is stuck to the bottom of the dish so it is then no problem if the lid rotates and changes position).
3. Obtain four 4 clean Q-Tips from the container using forceps, being very careful not to touch any of the remaining Q-Tips. Place these on a clean paper towel and fold the paper over to cover them.
4. In 20 minutes, walk to 3 different locations on the LTHS campus and take samples. Leave the “C” quadrant untouched which will be your control.
5. To take samples correctly, hold the end of one Q-tip, dip the other end into the clean distilled, and re-stopper the test tube. Be sure the Q-Tip is not dripping “wet”, if so remove droplets by touching clean paper towel. Then rub the Q-Tip thoroughly on the location you are sampling, record location in chart below.
6. Streak the “contaminated” Q-Tip on a selected quadrant of the agar plate while the plate is held inverted (to prevent bacterial cells from falling onto the agar fro the air). Be sure to keep a clear record matching the various quadrants (1-4) to the locations tested.
COMPLETE CHART!
7. After returning to the classroom, tape the lid to the bottom of the perti dish on opposite sides using two short pieces of tape.
8. Return the used Q-Tips to Mr. Brunet for proper disposal or follow disposal directions.
9. The Petri dishes will be incubated for at least 24 hours at 37°C.

Data:



Quadrant	Description	# of Colonies
1		
2		
3		
4		

Analysis:

1. What factors during collection of sample may have influenced your results?
2. Was there one location which showed to have more bacterial growth? Why?