

# Microbiology Lab Experiment Changes

**Experiment #:** 1-4

**Title:** Streak Plate Methods of Isolation

**Live Organisms:** *E. coli*

**Changes:** We are doing Streak plate and Standard Plate Count (see Experiment 6-1)

The 3-streak method works well for broth cultures; may not be adequate for agar cultures.

## Procedure

Work individually.

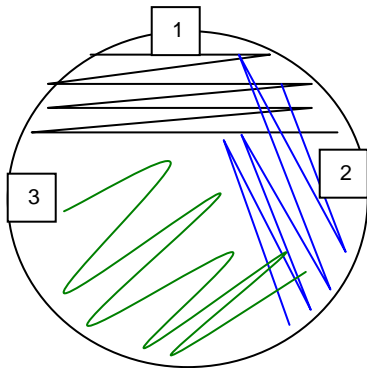
1. Obtain a TSA plate.

2. Obtain a loopful of the mixed culture and streak the TSA plate per directions in lab manual **or** per instructor demo.

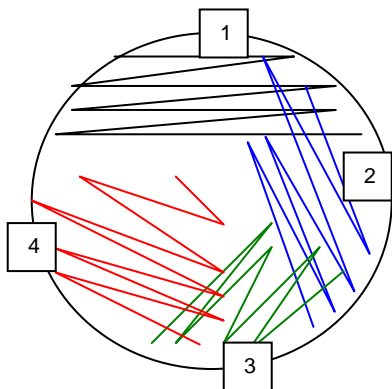
**Note:** The quicker you streak, the better the separation will be. An inoculum from a slant culture has many more bacteria in it than from a broth culture. As you move from area to area or quadrant to quadrant on the plate, drag the loop thru the previous streak only once or you will carry over too many bacteria and will not get isolated colonies. Flame the loop in between each streak!

3. Next period record the number of different types of colonies and any distinguishing characteristics (e.g., color, size). Did you get isolated colonies? If not, why not?

4. You will turn in **one** streak plate for grading. After incubation, you will have one more opportunity to streak a plate if your results need improvement.



The 4-streak method often works better for agar cultures.



**Take Home Lesson:** What is the purpose of the streak plate?