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Remember to label the bottom of the petri dishes. Hold the lid on to turn it over and label them.

## Petri Dish Listerine Experiment

### Scientific Method

1. State the problem. \_\_\_\_\_

2. Gather information on the problem.

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3. Form a hypothesis.

I predict that Listerine will \_\_\_\_\_

4. Perform an experiment to test the hypothesis.

### Supplies:

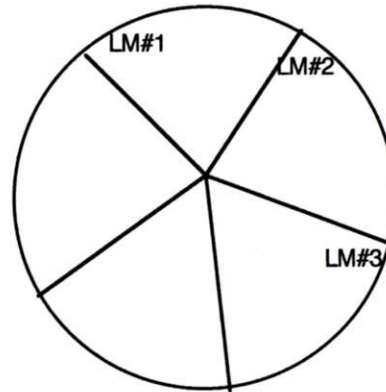
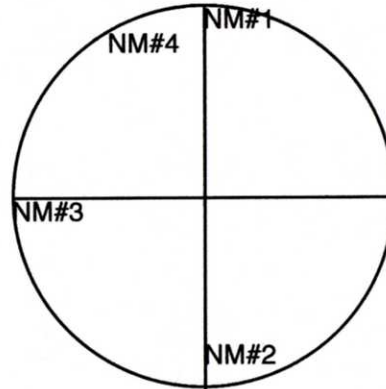
- 1) petri dishes: two per lab table, i.e. T1 & T2
- 2) agar, the gelatin that is already inside petri dish
- 3) cotton swabs                      4) small cups of Listerine
- 5) permanent marker              6) tape
- 7) rulers

### Procedure:

- (1) Determine the number of students participating. Assign each participating student a number. Start with number 1. Then mark the bottoms and sides of the petri dishes as instructed.
- (2) Each student that is participating will swab her/his mouth (gums, teeth, tongue) with a cotton swab.
- (3) Then gently wipe it across the agar in the petri dish marked NM for "Normal Mouth" in the assigned student # section. The cotton swab will be collected and thrown away.
- (4) Each student that is participating will rinse his/her mouth with Listerine for 60 seconds. The paper cup will be collected and thrown away.
- (5) Each student that is participating will swab her/his mouth (gums, teeth, tongue) with a cotton swab.
- (6) Then gently wipe the swab across the agar in the petri dish marked LM for "Listerine Mouth" in the assigned student # section. The cotton swab will be collected and thrown away.
- (7) Put a piece of tape all around the lids. Place the tape around the sides only.
- (8) To be safe, the petri dish must be sealed for the entire experiment. **If a student removes the tape and opens the petri dish, the student will be prevented from all experiments and dissections for the rest of the school year.**
- (9) The petri dish and agar are expensive. Each petri dish with the agar costs over \$1.50. Please be careful handling them.
- (10) Draw the divisions on step 5, record the data.

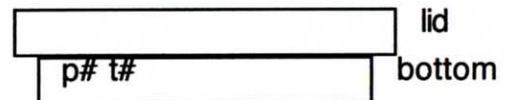
### SAMPLES only

If four students are participating, use this example to label the normal mouth petri dish.



If five students are participating, use this example to label the Listerine mouth petri dish.

Write your period # and table # on the sides of both petri dishes.



6. State the conclusion. Was your hypothesis correct or incorrect?