

Name: _____

Date: _____

Life Science

Period: _____

Viruses and Bacteria

Where can we find bacteria?

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Objectives:

- To take bacterial swabs from various places in the school
- To inoculate a petri dish with a bacterial culture
- To count bacterial colonies
- To find out where bacteria hang out
- To determine what kind of environmental conditions influence bacterial growth

Pre-Lab Questions: (answer in complete sentences)

1. Where do you think that you will find the highest amount of bacteria?

2. What do you think the petri dish will look like in 2 days?

Procedure:

1. Choose an index card to determine your sample location.
2. You and your partner will share one petri dish with another pair of students.
3. Turn the dish upside down and using your marker, place your initials and sample location along the bottom perimeter of the dish, **NOT IN THE MIDDLE**.
4. When you and your partner are ready, come up and get your sterile Q-tip. Be very careful not to touch the side that will collect your sample, as your hands can contaminate the Q-tip and alter your results.
5. When it is your turn, go to your assigned area and come back quickly!
6. Carefully open your petri dish (like Pac Man) and **lightly** rub your Q-tip across the agar on your side of the dish.
7. The second group to swab their sample will tape the dish shut. Both groups will draw what your dish looks like in **Figure 1**.
8. Place your petri dish upside down on the tray.
9. We will examine the dishes in a few days and you will draw your findings in **Figure 2**.

Data:

Location - _____

Figure 1 – draw your petri dish as soon as you have placed your sample on the agar.

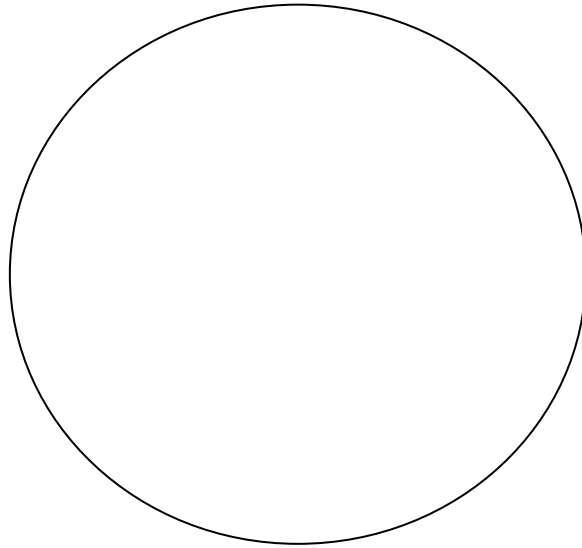


Figure 2 – draw your petri dish after a few days

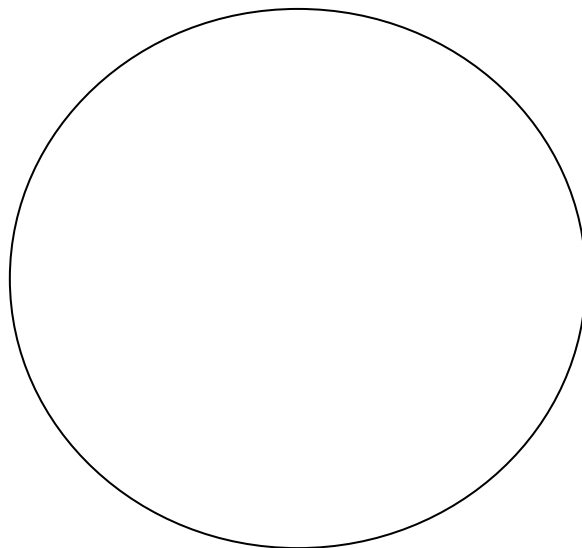


Table 1 – number of colonies on petri dish

Sample Location	Number of Colonies

Graph 1 – on a separate piece of graph paper, graph the entire class' results.

Analysis: answer in complete sentences.

1. How many clusters of bacteria appear to be growing on each petri dish?

2. Which petri dish had the most growth? The least?
