

Name: _____ Date: _____ Period: _____

CHARACTERISTICS OF BACTERIA LAB

STATION 1:

Pre-Lab: Some types of bacteria can ferment milk, producing lactic acid in the process. Yogurt is a product of fermentation. It is acidic and stays fresh longer than milk, and is also digested more easily. In this lab you will prepare a microscope slide of yogurt to examine the bacteria found within.

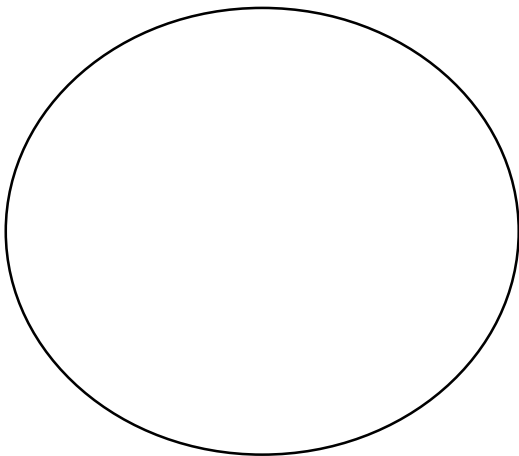
Like all organisms, bacteria are given scientific names (usually Latin or Greek roots). Rod-shaped bacteria are called bacilli, spiral-shaped bacteria are called spirilla and spherical-shaped bacteria are called cocci.

Materials: Toothpick, yogurt, microscope slide, dropper, water, coverslip, microscope

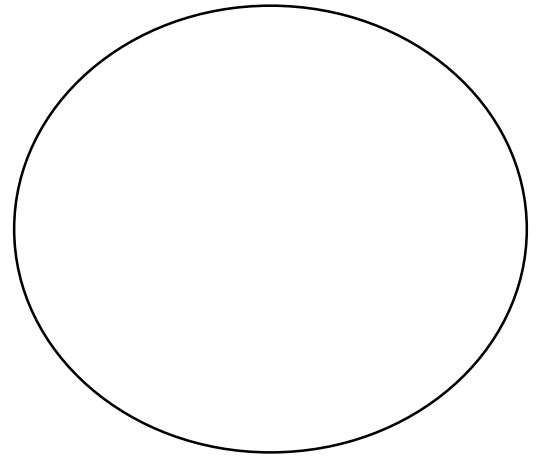
Procedure:

1. Use the dropper to add one drop of water onto the microscope slide.
2. Using a toothpick, place a small dab of yogurt in the water drop on the microscope slide. **CAUTION: DO NOT EAT IN THE LABORATORY.**
3. Mix the yogurt in the drop of water.
4. Put a cover slip over the mixture and observe it under the microscope.
5. Record your observations by drawing and labeling a picture of what you see in the microscope. Draw it under low and high magnification.

DRAW AND LABEL:



Magnification: _____



Magnification: _____

Analysis: According to your observations, what type of bacteria is responsible for the flavor of yogurt?

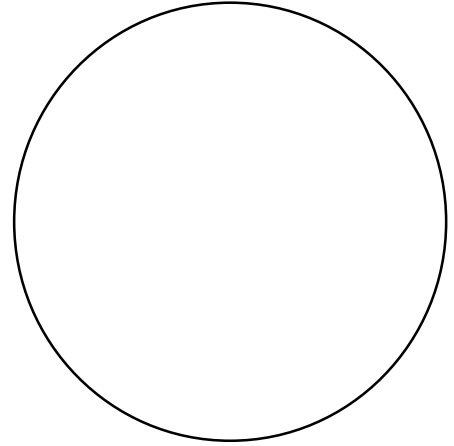
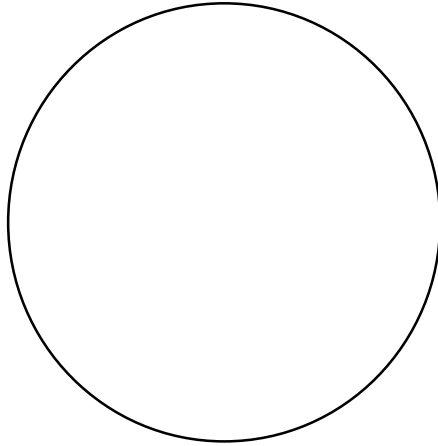
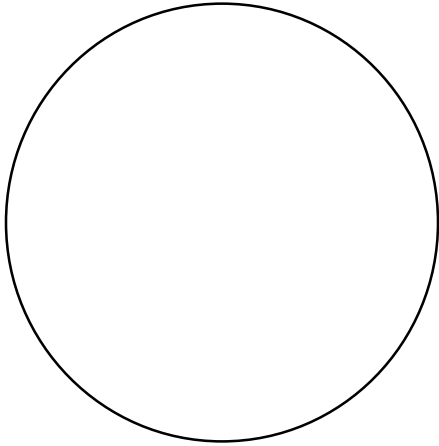
STATION 2: Examining Bacteria Prepared slides

Take the prepared bacteria slide from the tray. There should be 3 separate smears on that one slide. Observe each smear under low, medium and high power. Then draw what you see under the highest magnification. Write a short description on each of the bacteria you observed.

LEFT SMEAR

MIDDLE SMEAR

RIGHT SMEAR



Title: _____

Title: _____

Title: _____

Magnification: _____

Magnification: _____

Magnification: _____

Shape: _____

Shape: _____

Shape: _____

Description: _____

Description: _____

Description: _____

Draw and label a prokaryotic cell in the space below. Label the following parts: **cell wall, cell membrane, DNA, flagellum, and ribosome.**