Name Period Date

Unit 1 | Handout 4.1

Lesson 7: Bacteria in Yogurt

Purpose:	To attempt to identify how many different species of bacteria are found in a sample of organic yogurt.
Guiding Question:	How do scientists classify bacteria? What are the shapes and arrangements of bacteria?

Procedure. You will observe a sample of organic yogurt under high power on your microscope. You will be able to see thousands of individual bacteria. However, it is your goal to figure out how many different types of bacteria there are. How will you do this? Look for the different shapes and arrangements of the bacteria.

Data. In the table below, draw enlarged versions of the shapes and arrangements of the bacteria you observe. Then, write down the English shape and arrangement AND write down the Latin shape and arrangement of the bacteria. **You may not need all of the space provided.**

Enlarged Drawing	English Arrangement and Shape	Latin Arrangement and Shape
Answers will vary based on your observations.		

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Extending. Answer the questions below by going to 7bscience.com and using the links provided to find more information. Write 1-3 complete sentences for each question.

1. All of the bacteria you observed are considered probiotics. What is a probiotic?

Probiotics are organisms such as bacteria and yeast that are believed to improve health.

2. What are some different benefits of probiotics? (See list under Ailments)

Benefits include improving intestinal function and maintaining the integrity of the lining of the intestine; helping maintain a strong immune system; are effective in treating several illnesses (see article line for a full list).

3. What are the name of the bacteria found in the yogurt? (Use the StonyField link. Click on Nutrition Facts after the page loads). Write the information in the data table below. Make a row for each bacteria.

Then, look up pictures of each one and write down their shape and arrangement in English and Latin.

Bacteria Name	English Arrangement and Shape	Latin Arrangement and Shape
S.thermophilus	Chain of circles	Streptococcus
L. bulgaricus	Single or paired rods	Bacillus or diplobacillus
L. acidophilus	Chain of rods	Streptobacillus
Bifidus	Varied shapes & arrangements	
L. casei	Single & paired rods	Bacillus or diplobacillus