

Lesson Six

Microorganisms—Making Yogurt (Bacteria)

- Standard 5:** Students will understand that microorganisms range from simple to complex, are found almost everywhere, and are both helpful and harmful.
- Objective 2:** Demonstrate the skills needed to plan and conduct an experiment to determine a microorganism’s requirements in a specific environment.
- Indicator a:** Formulate a question about microorganisms.
Indicator b: Develop a hypothesis for a questions about microorganism based on observations and prior knowledge.
Indicator c: Plan and carry out an investigation on microorganism.
Indicator d: Display results in an appropriate format (e.g., graphs, tables, diagrams).
Indicator e: Prepare a written summary or conclusion to describe the result in terms of the hypothesis for the investigation on microorganism.
- Objective 3:** Identify positive and negative effects of microorganisms and how science has developed positive uses for some microorganisms and overcome the negative effects of others.
- Indicator b:** Identify how microorganisms are used as food or in the production of food (e.g., yeast helps bread rise, fungi flavor cheese, algae are used in ice cream, bacteria are used to make cheese and yogurt).

Procedure

1. Go to *Investigation Three—How Do You Make Perfect Yogurt?*
 - a. Read the “Background Information” about Yogurt.
 - b. Go over the Instructions on How “To Make Yogurt”
2. Follow all the directions as indicated.
3. Have the students write in their journals what they discovered.
4. Have the students write in their journals their conclusions.
5. Have the students answer the questions on page 12.2.17, *There Are Bacteria in My Yogurt!*
6. You can watch the YouTube video about how to make yogurt telling why you need to do certain things. **(Please View First)**
 - a. http://www.youtube.com/watch?v=bM_RRR2rn28