

Grades 6th to 8th

Lesson 2: Milk Quality & Safety Butter Lab Directions

Introduction

Milk can be transformed into other kinds of foods called dairy products. For example, the fat or cream can be separated from milk and used to make ice cream and butter.

In this lab, students will make butter from the cream of milk. Students will use measuring cups and digital scales to compare the experimental cream to butter ratio in this lab with the theoretical ratio.

Materials Needed

- Mason jars (pint sized) with lids and rings
- · Heavy whipping cream
- Digital scales
- · Measuring cup
- Bowls and spoons
- Calculators
- Pencils

Procedure

- 1. Assign students to lab partners.
- 2. Have students get jars, lids, rings, cream, measuring cups, bowls, and calculator for themselves.
- 3. Pass out the Butter Lab Sheet.
- 4. Allow students class time to complete the lab.
- 5. Walk around, answering questions and offering help as needed.
- 6. Do closure activity.
- 7. Collect the Butter Lab Sheet.

Closure

Today you made butter from cream. During the lab, you compiled data to find the experimental ratio of cream to butter. How does your experimental ratio compare to the theoretical ratio?

Summative Assessment

Students will complete the Butter Lab Sheet with a mastery level of 80% or higher.