

Teacher Instructions

Materials:

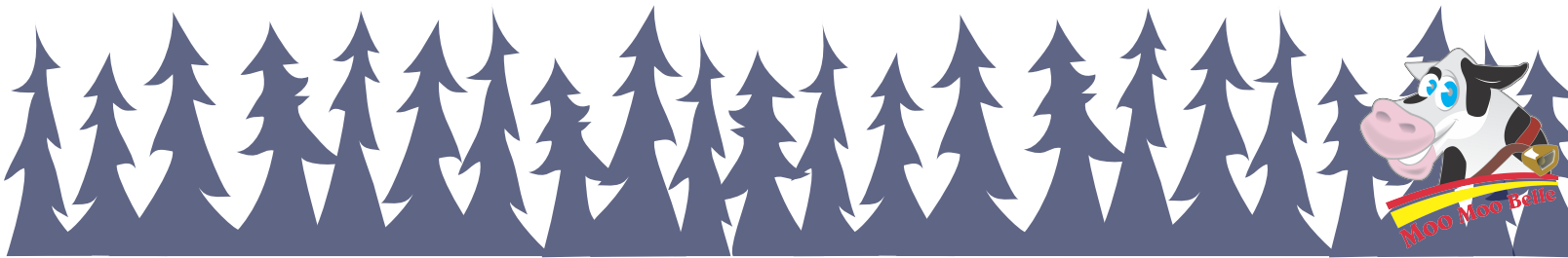
- 10 8oz Mason Jars* (for a class of 30)
- Spatula
- Plastic Knife

Ingredients:

- 1 pint of room temperature Whipping Cream (provided by Eberhard's)
- 1/4 teaspoon Salt (optional)
- Crackers or Bread

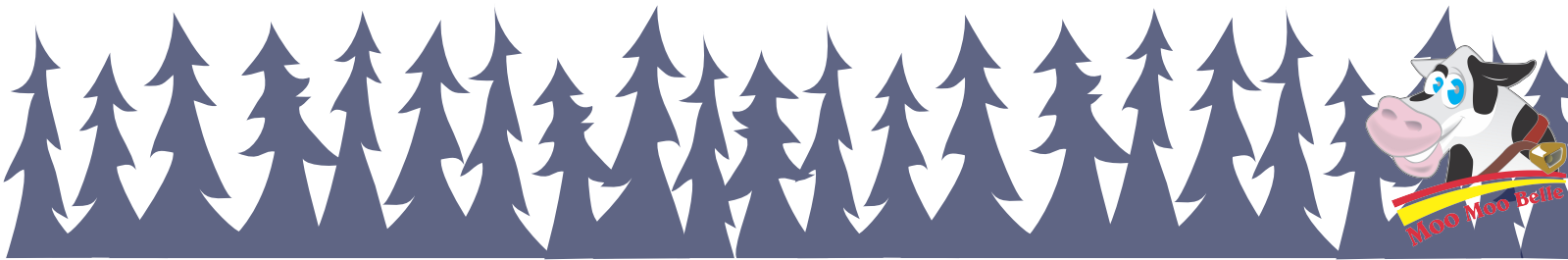
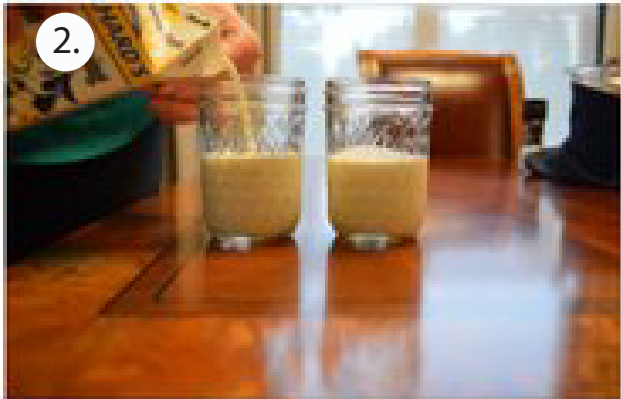
*for modification use one large jar and pass around entire class

1. Split your classroom into groups of three. Have designated members from each group collect materials and ingredients.
2. Have each group of students pour the whipping cream to fill half of the mason jar. Screw the lid on tight.
3. Have students take turns shaking the jar.
4. When the whipping cream thickens into whipped cream (about 4 minutes), stop and have students notice how the cream has now changed into whipped cream that they might eat on pie. Have students describe any changes that have occurred in **Question 1** of their handout.
5. Replace the lid and have students continue to shake it for around 6 more minutes. Yellow clumps will form as the butter fat particles begin to stick together. Have students complete **Questions 2 and 3** of the handout.
6. Pour out the liquid (sweet cream buttermilk) remaining in the jar.
7. Stir in salt (optional) and spread the butter on crackers for each student to try. Explain to the students that the liquid and solids separate to make butter.



EBERHARD'S DAIRY

FARM TO TABLE- Teacher Picture Instructions

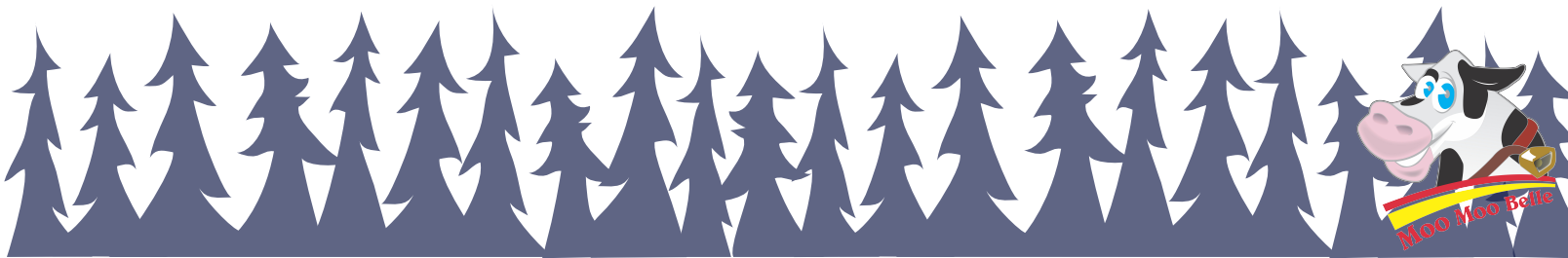


During the Experiment:

1. Describe any changes that have occurred in the jar.
2. What is the pale yellow clump?
3. What is the remaining liquid?

After the Experiment:

1. How long did your group shake the jar before the cream turned into butter?
2. Describe the difference in texture and color between the cream at the beginning of the experiment and the butter that you tasted at the end.
3. Did you like the taste of the butter you made? Why or why not?
4. Did the butter you make taste different from butter you buy from the store? How?



EBERHARD'S DAIRY

FARM TO TABLE- Teacher Answer Key

During the Experiment:

1. Describe any changes that have occurred in the jar.

The cream has turned from a liquid into thicker foam. The color may have changed from white to a pale yellow.

2. What is the pale yellow clump?

Butter.

3. What is the remaining liquid?

Sweet cream buttermilk.

After the Experiment:

1. How long did your group shake the jar before the cream turned into butter?

Around 10 minutes.

2. Describe the difference in texture and color between the cream at the beginning of the experiment and the butter that you tasted at the end.

The cream at the beginning of the experiment was a thick, white liquid. After the group shook the cream, it clumped together into a sticky yellow solid.

3. Did you like the taste of the butter you made? Why or why not?

Answers will vary.

4. Did the butter you make taste different from butter you buy from the store? How?

Answers will vary.

