



HOMEMADE BUTTER

EXPLORATORY QUESTION: Where does cheese come from? **Cream/Milk!**
What else is made of cream? **BUTTER!** How do we make butter?

PROJECT GOAL: To first explore where cheese and dairy products come from.
To have fun experimenting with making butter.

INSTRUCTIONS:

- 1 Where does cheese come from?** Have a discussion about how most dairy comes from cows. Look at some pictures of cows, cows have udders and when they are milked, we humans get to use that milk. **What other animals produce milk?** Goats, sheep. The milk is then used to make the cheese that will be in our quesadillas.
- 2 We are going to do a fun kitchen experiment** turning one ingredient - heavy cream, into something else—**Butter!** Measure out $\frac{3}{4}$ cup cream into the jar and make sure the lid is on tight.
- 3 NOW IT'S TIME TO SHAKE!** Gather the family and take turns. Set a timer, this will usually take at least 8 minutes. Turn some music on and get silly. Pause to check in here and there and notice when it starts to turn into whipped cream. You're getting there, but not quite yet. Keep shaking. It will happen quickly but suddenly you will hear and feel the butter turn solid.

NOTE: How does this happen? The shaking causes the fat molecules to separate and then join together to create butter.

- 4 Open up the jar and place a strainer over a bowl.** Pour out the contents, the butter will be in the strainer and the buttermilk will be in the bowl.
- Remember we started out with $\frac{3}{4}$ cup of heavy cream. How much buttermilk do you have? About how much butter? **Have them take some notes**, what did they start with, how long did it take, what is the ratio between butter to buttermilk. **Place butter into sealed container, sprinkle top with a little salt if desired.**
- 6 Enjoy the butter on some toast**

SUPPLIES NEEDED:

- ✓ 1 pint sized jar with a tightly-fitting lid
- ✓ Heavy cream or heavy whipping cream
- ✓ Measuring cup
- ✓ Strainer
- ✓ Bowl

