Ingredients: Cold heavy whipping cream (1 pint per class), Salted crackers
Materials: Tablespoon, 1 oz . plastic cups with lid (1 per student)

| Step 1 | Pour two tablespoons of heavy cream into each portion cup, place lid on each and <br> distribute to students. |
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| Step 2 | Shake container until butter forms a soft lump. Continue to shake until buttermilk <br> separates out of the lump and the container contains a solid lump of butter and liquid <br> buttermilk. The process should take 3-5 minutes. |
| Step 3 | Pour off or drink the buttermilk and enjoy the butter with crackers! |

SCIENCE BREAK: What do you see?

1. As you shake the cream in the jar, what is happening to the volume?
a. Volume is increasing
b. Volume is decreasing
2. Stop shaking after two minutes and open the lid. What do you see?
a. Skim milk
b. Whipped cream
3. How does the cream become whipped cream?
a. By shaking air into the cream
b. By adding sugar into the cream
4. What states of matter are the two final products in your cup?
a. Gas and Solid
b. Liquid and Solid
5. How does the whipped cream become butter?
A. Agitation until whipped cream turns into a solid and liquid.
B. By heating and cooling the whipped cream.
6. What three important vitamins can you find in butter and other dairy products that help keep our bodies and bones healthy?
