



# Step

Projects  
for ages 2-6

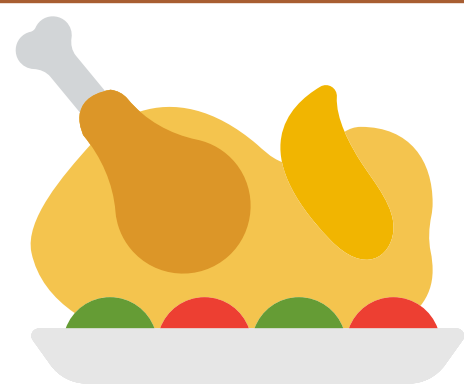


# into



# STEAM

Science Technology Engineering Art Math



## Making Butter!



Did you know your preschooler can help  
you make butter?!

This fun and easy science experiment has  
a yummy product perfect for sharing this  
Thanksgiving!

### You will need:

- A mason jar with a lid
- A carton of heavy whipping cream
- Salt
- Bread (if desired)

**Step 1:** Caregivers, fill the jar half way with heavy whipping cream. Secure lid tight.

**Step 2:** Take turns shaking the jar. For young children they can also carefully spin the jar on a rug if they get tired. As you agitate the cream the fat will begin to clump. It will look like sandy ice cream.

**Step 3:** After 10 minutes of continuous shaking/ rolling, the cream will have converted to butter! Caregivers, drain the excess liquid and add salt (1 pinch at a time to taste). Try it on bread with and without salt to see the difference.

### Talking Points & Further Exploration

Match the difficulty to what fits your family best. It can be as easy or as complicated as you need it to be.

- Talk with your child about what is happening to the heavy cream in the jar. Ask them to describe what it looks like and what they think is happening in the jar. Ask them what they think will happen, and when finished ask them how their original thoughts compare to the final product. **This is introducing your child to the scientific method: observe, question, hypothesize, experiment, analyze, conclude.**
- **As you shake the jar, the fat molecules start to stick and clump together.** The liquid you drain out is the left over buttermilk. A long time ago buttermilk was the product left over when people churned butter by hand. They couldn't just buy butter from the store! Modern buttermilk is a product of **pasteurized milk** that has had cultures added to it. Your buttermilk won't taste like the buttermilk you get from the store, but this is how it gets its name!
- All baking and cooking involve chemistry. Children learn sequencing, cause and effect, measurements, fine motor skills, and background knowledge through cooking. It's fun and the results are both yummy and satisfying!
- Check out the books below for more cooking fun and food information.

Click the book covers for more cooking fun!

(ebooks available through [hoopladigital.com](http://hoopladigital.com) & [lakecounty.overdrive.com](http://lakecounty.overdrive.com))

