



# Thanksgiving STEAM Activities

Young children learn about science through hands-on experiences. They learn by observing, thinking, and talking about how materials feel and how they change. Here are a few easy-to-implement activities you and your child can do together to encourage scientific thinking.



## Make Your Own Butter

Making your own butter is a fun way to see science in action.

### Materials Needed:

- Heavy whipping cream
- Jar with lid
- Small container
- Bread
- Toaster

### Instructions:

- 1) Fill your jar about halfway with heavy whipping cream. Tightly secure the cover.
- 2) Shake it! This should take about 15 minutes. After 5 minutes, stop and to check your progress. (You will not see much change at this point; it is just nice to take a break and make predictions about what is happening to the whipping cream.)
- 3) Check your progress again at 10 minutes. You and your child will begin to see the changes to the whipping cream. You can discuss the changes in matter. You took a liquid and made it a solid.

*(continued)*



- 4) You may need to continue to shake the jar until it is the right consistency.
- 5) Open the jar and strain the solid (butter) from the liquid and place it in a different container. This is a great time to discuss what you see.
- 6) Place a slice of bread in the toaster.
- 7) Spread the butter on your toast. Enjoy!



## Bouncing Corn Activity

The Bouncing Corn Activity provides you with an opportunity to talk about a wide-range of scientific terms like gases, liquids, and solids with your child.

The corn bounces up and down in your container for up to an hour. You and your child will have a blast watching the corn bounce.

### Materials Needed:

- A clear glass container
- Popping corn/ popcorn kernels
- 2 1/2 – 3 cups of water
- 2 Tbsp. of baking soda
- 6 Tbsp. of white vinegar
- Food coloring (optional)

### Instructions:

- 1) Fill your jar with water and add a few drops of food coloring.
- 2) Add your baking soda and stir well until it is all dissolved.
- 3) Add a small handful of popping corn kernels.
- 4) Add the vinegar and watch the corn start to bounce up and down!

Let your child measure the ingredients used in this experiment and discuss math concepts as you measure and add ingredients. Ask questions like:

- What do you think will happen?
- What caused the kernels to bounce? (The carbon dioxide gas produced by the reaction of baking soda and vinegar caused the kernels to rise.)

Extend the activity by adding more ingredients and watching the impact those actions have on the experiment.

- What will happen if you add more vinegar?
- What will happen if you add more baking soda?

Enjoy watching the popcorn kernels bounce!