



NATIONAL GRANGE AGRICULTURE LITERACY WEEK

March 16 - 20, 2026



Ice Cream in a Bag

Join Chuck, who wishes for unlimited ice cream and is taken on a magical journey to a dairy farm to learn where it comes from

- Introduce yourself and your connection to agriculture.
Read the book *Tales of the Dairy Godmother: Chuck's Ice Cream Wish*. (15 minutes)
- After reading the book, transition into the below activity. (Activity is based on 30 students).

Materials Needed:

Per student

- 1 sandwich bag and 1 quart bag
- 1 sugar packet
- 2 salt packets
- 1 spoon
- 1/2 c. ice per quart bag
- 1/3 c. half & half per student (or the volume of a 3oz dixie cup)
(1 quart of half & half will serve 10 students)
- 1 tsp. vanilla

Activity Procedures:

Interest Approach (5 minutes)

1. Ask students, "What happens to the milk when it gets very cold?"
2. Inquire, "Why do we add salt to the ice when making ice cream? How does shaking or mixing help make ice cream?"

Ice Cream in a Bag Activity (15 minutes)

1. Each student should open their sugar packet and put the sugar in the sandwich bag. The teacher can move to each student and add the half and half and vanilla to the sandwich bag. Push out excess air and seal.

- Alternatively, vanilla and half and half can be pre-measured in a cup for students to pour into their own bag.

2. In the quart bag, empty the 2 salt packets and add ice.

3. Put the sealed sandwich bag into the quart bag with the ice. Seal the quart bag and let your students shake vigorously for 3 minutes until the half and half has become thick.

- This process will not take long with such a small amount of liquid.
- The ice cream won't be hard; it should be the consistency of soft serve.

4. Remove the sandwich bag from the quart bag, open, and dig in! Students can eat directly from the sandwich bag, or they can transfer it to a bowl or cup.

Conclusion (3 minutes)

Ask the students:

- What did you find interesting about making ice cream today?
- How much ice cream do you think we could make a day from one cow? (Roughly 2-3 gallons per day. This depends on the breed of dairy cow, among other factors).

Remember to share your photos (if permissible) and stories about your experience presenting this Agricultural Literacy Activity with your community.

You can also send information to: lecturer@nationalgrange.org

*this activity is brought to you as part of Project Sustenance.

