

**Materials:**

- 1-quart size freezer bag
(Do not use off-brand or generic bags!)
- 1-gallon size freezer bag
- ½ cup whole milk
- 1 ½ tbsp. sugar
- ½ tsp. vanilla extract
- 4 cups ice
- 4-6 tbsp. rock salt
- spoons

Optional Materials:

Kitchen towels, oven mitts, or gloves to protect hands from cold

Description: When science and food meet, you might get a tasty dairy treat.

Purpose: Food science activity that connects everyday foods to the farm.

Directions:

1. In quart-size freezer bag place ½ cup whole milk, 1 ½ tbsp. sugar, ½ tsp. vanilla extract. Securely seal.
2. In gallon-size freezer bag place 4 cups ice and 4-6 tbsp. rock salt (coarse kosher salt will work).
3. Place quart bag in gallon bag. Seal gallon bag securely. Position quart bag so the top of the bags are parallel and hold securely.
4. Shake bags until milk begins to freeze and ice cream begins to form, approximately 5 minutes.
5. Enjoy!

Information:

Salt lowers the temperature of ice while melting it at the same time, allowing the milk to freeze and turn into ice cream.

Freezing a liquid creates ice crystals. The more you shake and break the ice crystals, the smoother the ice cream

Go Further:

1. Record the temperature of the ice without salt and after the milk mixture has formed ice cream. Do the same for the temperature of the milk mixture and once it becomes ice cream.
2. Describe and measure the volume and weight of the ingredients individually and collectively.
3. Survey students or family members on their favorite flavors of ice cream. Chart.