Title of Lesson: Homemade Ice Cream in a Bag

Theme: Physical Science

Performance Standard(s) Covered (enter code):
S1CS1

Enduring Standards (objectives of activity):

Habits of Mind
- ☒ Asks questions
- ☐ Uses numbers to quantify
- ☐ Works in a group
- ☐ Uses tools to measure and view
- ☐ Looks at how parts of things are needed
- ☒ Describes and compares using physical attributes
- ☒ Observes using senses
- ☒ Draws and describes observations

Content (key terms and topics covered):
States of matter (solids, liquids), freezing

Learning Activity (Description in Steps)
Abstract(limit 100 characters): In this activity, students were able to make homemade ice cream in a bag using the ingredients.
Details: 1. Fill the large bag half full of ice, and add the rock salt.
2. Put milk, vanilla, and sugar into the small bag, and seal it. Put this bag into another small bag and seal the second bag. It works best if they are both airtight.
3. Place the small bags inside the large one and seal carefully.
4. Shake until mixture is ice cream, about 5 minutes.
5. Wipe off top of small bag, then open carefully and enjoy!

Materials Needed (Type and Quantity):
Per student:
- 1 tablespoon sugar
- 1/2 cup milk or half & half
- 1/4 teaspoon vanilla
- 6 tablespoons rock salt
- 2 quart-size Ziploc plastic bag
- 1 gallon-size Ziploc plastic bag
- Plastic spoon
Ice cubes

Notes and Tips (suggested changes, alternative methods, cautions):
Make sure you have enough ice and salt for all the students or the ice cream will not freeze. Use two quart-size bags to prevent leaking. Teachers should check all bags to make sure they are sealed completely. They should also help to open the bags (over a sink is best) to minimize the mess, and have plenty of paper towels to clean up melted ice and condensation.

Sources/References:
1)
2)
3)