



FUN THINGS TO DO AT HOME

HOMEMADE ICE CREAM



Objective: Use an exothermic reaction to make ice cream

Materials:

- 1 cup heavy cream, half and half, or whole milk
- 1/3 cup salt
- 2 tbsp sugar
- 1 or 2 tsp vanilla
- 3 cups ice
- 1 gallon-sized sealable bag
- 1 quart or sandwich sized sealable bag
- Oven mitts (optional)

Directions:

1. In the small sealable bag combine vanilla, sugar, and dairy. Seal the bag well while removing excess air
2. Put the ice and salt in the large sealable bag then place the small bag with the ice cream mixture into the large bag. Seal well!
3. Shake the bag! Shake for 5 minutes and then feel the inside bag to see if the ice cream is hard. Shake for an additional 5 minutes then test the ice cream.
4. If more time is required, shake the bag in 5 minute increments until the ice cream is hard. The ice and salt mixture will be very cold- use the oven mitts as necessary
5. Rinse the small bag before serving. Make sure to rinse the seal so salt does not get into the ice cream

Guiding Questions:

While making the ice cream, think about how the ingredients are combining and changing. How does the salt change the ice and change the freezing point of the ice? What happened to the ice? Did the ice melt quickly? How cold do they feel? Water normally freezes at 0° Celsius but when mixed with salt it freezes below 0° Celsius, which makes it cold enough to freeze the ice cream!