

Ice Cream in a Bag

Customary Measurement:

1 gallon ziploc bag
1 quart ziploc bag (heavy duty)
4 cups ice
1/4 cup salt
1 cup whole milk
1 teaspoon vanilla extract
2 tablespoons sugar
cups and spoons cups and spoons

Metric Measurement:

1 large ziploc bag
1 small ziploc bag
1 liter ice
60 ml salt
250 ml whole milk
5 ml vanilla extract
30 ml sugar

Procedure:

1. Pour the milk, vanilla extract, and sugar into the small ziploc bag. Squeeze as much air out as possible and seal the bag carefully.
2. Place the small ziploc bag down into the large bag. Cover with the ice and salt. Seal the large bag tightly.
3. Shake, toss, and flip the "ice cream machine" for 5 to 10 minutes. If the bag gets too cold to handle, wrap it with a towel or pass it from person to person. Don't open the large bag to check the ice cream because it may not seal properly afterwards.
4. Open both bags and spoon the ice cream into small cups. Enjoy!

Flavor variations:

1. Substitute other extract flavors for the vanilla.
2. Omit the vanilla and half the sugar. Add strawberry or chocolate syrup to the milk mixture.

Science Explanation:

The salt lowers the freezing point of the water which allows it to get colder than ice (about 28 degrees). This super-cold water and ice mixture causes the liquid milk mixture to freeze and become solid.