Science Grabbers
Ice Cream

prepared by:
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What You Need:
1 cup (240 mL) milk (2% is OK)
1 cup (240 mL) whipping cream (evap. skim milk is OK)
1/2 cup (120 mL) sugar (can use less)
1/2 tsp. (2.5 mL) vanilla extract
nuts and fruit as desired
chocolate syrup (if desired)
1/2 gallon zip plastic bag
1 gallon zip plastic bag
rubber spatula
thermometer (optional)
crushed ice
3/4 cup rock salt (table salt is OK)

What You Do:
1. Put all ingredients in smaller zip bag and seal tightly.
2. Place smaller bag inside of large bag. Pack crushed ice around the small bag.
3. Pour at least 3/4 cup of rock salt evenly over the ice. Seal the large bag.
4. Have students knead the bag for about 10 minutes.
5. Open the outer bag and remove the inner bag. Carefully open the small bag and use a spatula to stir the mixture. Be sure to scrape the inside of the bag. Reseal the small bag.
6. Drain ice water from larger bag and repack the small bag inside. Add more crushed ice and salt.
7. Knead for 5 minutes. Mixture will make about 3 cups of ice cream.

What Happens:
The addition of the salt to ice lowers the freezing point of the ice in the outer bag. This allows the ingredients inside the small bag to freeze, thus making ice cream.

Extensions:
Use the thermometer to "take the temperature" of both the ice cream mixture and the ice/salt mixture. Compare the data to the temperature of ice without salt.

Cautions:
1. Rock salt is typically dirty and may contain harmful ingredients. It should not be eaten.
2. Before opening the smaller bag be sure to wipe around the opening to remove any salt water that may be present.

Thanks to Kimberly Granatire, Pittsburgh, PA

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