# Chemistry Lab Title:
# Ice Cream a really cool experiment

**MATERIALS**

This recipe is enough for **two students**, so you need to work with a partner.

1/2 cup milk
1/2 teaspoon vanilla
1/2 cup whipping cream
1 tablespoon sugar
4 cups crushed ice
4 tablespoons salt
2 quart size Zip-Loc bags
1 gallon size Zip-Loc freezer bag
A hand towel or gloves to keep fingers from freezing as well!

**PROCEDURE**

1. Add 1/4 cup sugar, 1/2 cup milk, 1/2 cup whipping cream, and 1/4 teaspoon vanilla to the quart Ziploc ™ bag. Seal the bag securely.
2. Put 2 cups of ice into the gallon Ziploc ™ bag.
3. Use a thermometer to measure and record the temperature of the ice in the gallon bag.
4. Add 1/2 to 3/4 cup salt (sodium chloride) to the bag of ice.
5. Place the sealed quart bag inside the gallon bag of ice and salt. Seal the gallon bag securely.
6. Gently rock the gallon bag from side to side. It's best to hold it by the top seat or to have gloves or a cloth between the bag and your hands because the bag will be cold enough to damage your skin.
7. Continue to rock the bag for 10-15 minutes or until the contents of the quart bag have solidified into ice cream.
8. Open the gallon bag and use the thermometer to measure and record the temperature of the ice/salt mixture.
9. Remove the quart bag, open it, serve the contents into cups with spoons and ENJOY!

**ANALYSIS/QUESTIONS**

1. At what temperature does water normally freeze?
2. What was the temperature of our salt water solution before you started and when you finished?
3. What do you think happened?
4. What does the sodium chloride do?
5. Where can we use this lesson in real life?
6. Who invented ice cream?