

AFNR Food Science

Ice Cream Lab

Food Chemistry/Physics

1. How is chemistry used in food science?
2. Where have you seen chemistry in action in food?

	Thermodynamics	Freezing point	Physical change
Definition			
How does it relate to making ice cream?			

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Ice Cream

***When making food in the lab, caution should be used when tasting, unless sterile techniques are used.**

Materials

Sugar
Vanilla
Milk - Soy, Almond, Whole, Skim
Whipping Cream
Ice
Rock Salt
Gallon Freezer Bags
Quart Freezer Bags

Procedure:

1. In a 1-quart zip-lock bag, place 1 cup milk of your choice, 1 cup whipping cream, $\frac{1}{4}$ cup sugar, and 1 teaspoon vanilla.
2. Seal the bag tightly with duct tape.
3. Place the 1-quart zip-lock bag in a 1-gallon zip-lock bag.
4. Pack ice around the 1-quart bag.
5. Add rock salt to the top of the ice.
6. Seal the 1-gallon bag tightly with duct tape.
7. Toss the bag back and forth between the members of your group, be careful not to drop the bag, as it will burst!
8. Continue tossing until the ice cream is frozen.
9. Discard the ice and salt in the appropriate container.
10. Rinse the 1-quart bag containing the ice cream. Add flavorings, if desired.
11. Divide the ice cream into bowls or cups and enjoy!