

# **FSEA**

# **PROJECT**

# **PLANS**

***October 2003***

## **THE ICE CREAM PROJECT**

### **ICE1**

---

---

Applicable Grades	4 <sup>th</sup> through 12 <sup>th</sup>
Number of Members Per Team	One
Number of Kits Per Team	One
Number of Sessions	One

---

---

#### **SKILLS AND ENGINEERING CONCEPTS DEVELOPED:**

Learn to follow instructions, conservation of energy, effects of salt on ice and the joy of eating your science experiment..

## **INTRODUCTION:**

Home made ice cream is familiar to old people, but may be new to most kids today. The ability to take ice which is at about 32 degrees and cool it down further by adding salt is both interesting and educational. This is an experiment which some may want to repeat at home and explain the scientific principles.

## **OBJECTIVE:**

Make ice cream with very simple equipment. Enjoy the experience.

## **COMPETITION:**

The competition for this project is success in making good ice cream, but carefully following the instructions.

## **PROJECT DESCRIPTION**

For the best success the following steps should be followed carefully:

1. Put one tablespoon of sugar in the small bag(1 pint).
2. Add either  $\frac{1}{4}$  teaspoon of vanilla or two tablespoons of chocolate syrup to the small bag.
3. Add  $\frac{1}{2}$  cup of whole milk to the small bag.
4. Carefully seal the small bag.
5. Fill the large bag (1 gallon) half full of crushed ice.
6. Add  $\frac{1}{4}$  cup of salt to the large bag.
7. Place the small (sealed) bag in the large bag, on the ice and salt.
8. Shake the large bag until the contents in the small bag is ice cream. (This will take 10 to 15 minutes)
9. Remove the small bag, carefully wipe off the top to remove any salt.
10. Open the small bag and enjoy the ice cream.

## **MATERIAL:**

Provided by FSEA:

- One gallon plastic zip lock bag
- One-pint plastic zip-lock bag.
- Measuring spoons tbsp. and tsp.
- Rock salt
- Sugar
- Plastic spoon
- Vanilla Flavoring
- Chocolate Syrup

Provided by the school:

- Crushed Ice
- Whole Milk