

ICE CREAM LABORATORY



Materials

(for a group of three people)

- Measuring spoons and measuring cup
- 1 quart zippered plastic bag
- $\frac{1}{4}$ cup sugar
- $\frac{1}{2}$ teaspoon vanilla
- 1 cup 2% milk
- 1 cup half & half
- Duct tape
- 1 gallon zippered plastic bag
- 2 lbs. ice
- $\frac{1}{2}$ cup water
- 1 cup rock salt
- Paper towels
- Scissors
- Plastic spoons
- Flavorings and toppings (optional)

DIRECTIONS

1. Divide students into groups of three.
2. In the quart-sized zippered bag, place sugar, vanilla, milk and half & half. Close bag and massage bag gently to mix contents well. When contents are mixed, open one corner of the bag and squeeze the air out completely. Reseal the bag and cover seal with duct tape.
3. Place quart bag in gallon bag. Add ice around small bag then rock salt and water.
4. Seal this bag with duct tape. Note the time. Toss the bag gently in your hands, using paper towels to protect your hands from the cold as well as protect the mixture from your warm hands. Continue to toss and massage the bag gently to help ensure adequate mixing of contents.

In about ten minutes, the mixture should be frozen. Note the exact time your bag freezes. Cut the gallon bag off at the top and dispose of the saltwater and ice mixture.
5. Wipe the outside of the small bag clean with paper towels. Cut the bottom corner of the bag at an angle. Squeeze a small amount of the ice cream into a cup and measure the temperature.

After gathering all data, squeeze the bag to release serving sizes of ice cream into cups for each student. Add toppings and be neat, but have a good time!