

## ICE CREAM in a BAG

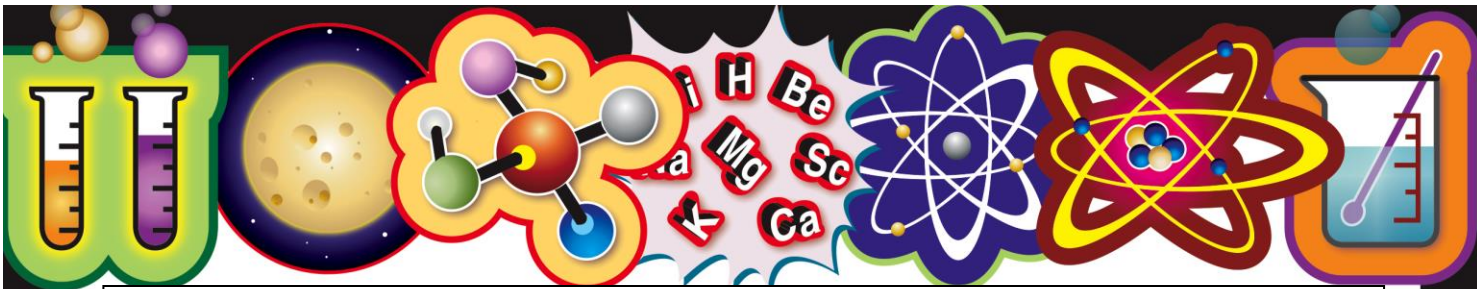


You will need:

- 4 oz of milk
- 4 oz of cream
- 1/4 tsp of vanilla (or use other flavours usually found near the vanilla in a grocery store - you can use chocolate syrup for chocolate ice cream)
- 4 tsp of sugar
- A few drops of food colouring (optional - if you want colourful ice cream)
- Lots of ice
- Lots (half cup) of salt. Rock salt works best.
- Small zip-lock freezer bag
- Large zip-lock freezer bag

What to do:

1. Put the milk, cream, flavouring, colouring, and sugar into the **SMALL** zip-bag and zip it shut (be **sure** it is zipped up and closed completely)
2. Put about a cup of ice into the large bag and cover the ice with a small handful of salt. Put the small bag with your ingredients into the larger bag.
3. Add some more ice and then some more salt. Keep adding salt and ice until the bag is almost full.
4. Zip it shut (be sure it is zipped) and then carefully hold opposite sides of the bag and shake the bag back and forth (like your steering a car) for about 5-8 minutes.
5. Open the larger bag and take out the smaller bag - it should be full of ice cream! Rinse off the bag under running water to remove any salt that may be near the opening of the bag.
6. Open and enjoy!



### The science behind it:

When you added salt to the ice, the chemistry between the two forced the ice to melt. Before the ice could melt though, it needed to borrow heat from objects that surround it. This is called an *ENDOTHERMIC* process. Since your ingredients are not as cold as the ice, it borrowed heat from your ingredients making them colder! When they get colder, they freeze up into ice cream. Yum!

### Talking points:

- When was ice cream first made?
- How has the production of ice cream changed over time?
- If you could create a new flavor of ice cream what would it be and why would you want to make it?

