

Homemade Ice Cream in a Bag?!?

By: Rachel Heeren

Summary

Ever wonder how ice cream is made? Ever wanted ice cream really badly but you don't have any at home? Well look no further! Using chemistry concepts of solutions, freezing points, and heat transfer, making ice cream at home is as simple as putting three ingredients into a bag of ice and salt to get ice cream in as little as 5 minutes!

Materials

1. 1 gallon bag
2. 2 quart size bags
3. 4 cups of ice
4. $\frac{1}{2}$ cup of salt
5. 1 tablespoon of sugar
6. $\frac{1}{2}$ cup of milk, cream, or half-and-half
7. $\frac{1}{4}$ teaspoon of vanilla extract
8. gloves, towel, or pot holders (to shake the bags)
9. bowl & spoon
10. toppings!

Procedure

Link to Video:

Written Out Instructions:

1. Measure the required ingredients out and set them aside.
2. Combine the milk (or cream or half-and-half), sugar, and vanilla extract into a quart size bag and seal completely shut. Make sure to take out all of the air before closing.
3. Place the sealed quart bag into another quart bag and seal shut (this is to ensure your ice cream doesn't spill or combine with the salt and ice to become salty).

-
4. Combine the ice and salt into the gallon bag.
 5. Place the quart bags inside the gallon bag and seal the gallon bag shut.
 6. Put on your gloves (or towel or pot holders) and shake the bag! Keep shaking for 5-10 minutes until the ice cream is the consistency you want.
 7. Scoop out the ice cream into a bowl and enjoy! If you really want to be creative, add whatever toppings you want to your ice cream!

Materials & Resources

1. <https://www.thekitchn.com/freezing-science-the-role-of-s-124357>
2. <https://teachnet.com/lessonplans/science/plastic-bag-ice-cream-recipe/>
3. <https://www.youtube.com/watch?v=s1CpSrXa1EI>
4. <https://www.stanpacnet.com/11-fun-ice-cream-facts-2017/>

