

Let's Make Blue Bucks[®] Ice Cream

During the summer, some days can be quite a scorcher. These are perfect days to enjoy some nice, cold ice cream. The idea of making your own ice cream may seem impossible, but here's an easy way to make your own using various items and ingredients you may already have at home. It's all possible thanks to the applied science of chemistry! What you will need:

- Measuring spoons
- Oven mitts
- $\frac{1}{2}$ cup half-and-half or milk • 1/4 tsp. vanilla extract

• Measuring cups

• A gallon-sized Ziploc bag

- A small Ziploc bag
- A timer • 4 cups of ice
- | Tbsp. sugar
- $\frac{1}{2}$ cup salt
 - 2 drops blue food coloring

I. Take the small bag and place one tablespoon of sugar, $\frac{1}{2}$ cup of half-and half (or milk), and 1/4 teaspoon of vanilla extract. Seal the bag.

2. Add four cups of ice to the gallon-sized bag. Then add $\frac{1}{2}$ cup of salt to the bag. 3. Now, place the closed, small bag inside the gallon-sized bag with the ice and salt. Be sure both bags are sealed shut.

4. This is where the chemical reaction happens! Set a timer for 5 minutes. Using the oven mitts for protection, shake the bag until the timer goes off.

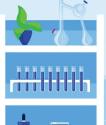
5. When the entire 5 minutes are up, open the gallon-sized bag and remove the smaller bag. Ta-da! Inside the smaller bag should be your very own ice cream! (If it's not frozen all the way, just seal the bag and place it back into the larger bag. Seal

the larger bag and keep shaking for another minute or two.)

6. Now, very carefully add 2 drops of blue food coloring and stir it into the ice cream to change its color.

The last step is to enjoy your Blue Bucks ice cream! Wasn't that easy?

The science behind this project is the main chemical reaction between the ice and the salt. As the salt melts the ice much quicker, it causes the ice cubes to feel much colder. This allows the ingredients to solidify into ice cream faster.







Ice cream, candy, slime and a pinewood derby boxcar what do all these things have in common? They're all a part of an applied science! Some sciences only work in theory and numbers, but applied science is something you can put into practice. This includes fun outcomes, like the creation of your favorite ice cream or building a wooden boxcar to race down a slope. Applied science can be very inspiring and create excellent hands-on learning opportunities.

For our next Blue Bucks[®] STEM sweepstakes, a Blue Bucks member will receive an applied science prize pack, complete with a Dippin' Dots Frozen Dot Maker, a soap and bath bomb making kit and an edible candy making kit. We'll draw the winner on June 30, 2023, and as a Blue Bucks member, you're already entered!

For contest rules, visit capfed.com/bbprize.

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This prize is perfect for the future scientist or for anyone looking to have, and make, some fun this summer!

Have a great summer learning, saving, and of course, enjoying some ice cream!







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Way Cool Ice Cream Facts

• One of the most unusual ice cream flavors to come out of Kansas City is Joe's Kansas City BBQ flavor.

• Kansas ranks within the top 10 states that consume the most ice cream in the country.

• A "Brain Freeze" is triggered when cold ice touches the roof of your mouth, which causes blood vessels in the head to dilate. Ouch!

• The two favorite flavors of ice cream in the USA are vanilla and chocolate.

