



I scream, You scream, We all scream for Ice Cream!

Supplies

- 1/2 cup of milk
- 1/2 cup of cream
- 1/4 teaspoon of vanilla or other flavouring (you can also use chocolate syrup for chocolate ice cream)
- 4 teaspoons of sugar
- A few drops of food colouring for colourful ice cream
- Lots of ice
- 1/2 cup of salt. Rock salt (sold at hardware stores) works best.
- Small (4-cup size) Ziploc freezer bag
- Extra large Ziploc freezer bag
- Thermometer (optional)

This edible science experiment explores temperature and teaches how materials are affected by heating and cooling. This experiment teaches that materials are sometimes changed by heating or cooling and that by observing such changes, we can infer how hot or cold an object is.

Kids will learn that thermometers provide a helpful way to measure and describe the hotness or coldness of things— a more accurate measure than relying on our own senses.

Why do you need salt to make ice cream? Why didn't we need a freezer? When salt is added to ice, the chemical reaction between the two, forces the ice to melt. Before the ice can melt, though, it needs to borrow heat from objects that surround it. This is called an endothermic process.

Since your dairy ingredients are not as cold as the ice, it borrowed heat from your cream and milk, making them colder. When they get colder, the water molecules freeze turning milk and cream into edible ice cream. Yummy Yum Yum!