## ICE CREAM IN A BAG

## You will need:

A large bag of ice
Salt
Milk - can be flavoured
1 small sealable plastic bag
1 large sealable plastic bag
Tea towel



Optional - vanilla essence, chocolate drops, sprinkles, a cone!

## Instructions

Pour a cup of milk into the small sealable plastic bag. Check the bag is tightly sealed. You don't want the salty ice getting inside.

Half fill the bigger sealable bag with ice and add two tablespoons of salt.

Put the milk bag into the ice bag and give it a good shake. Carefully roll the ice over the milk keeping the milk in contact with the ice as much as possible.

Wrap the bag in a tea towel to protect your hands if it becomes too cold to touch.

Check the milk after 5 minutes, if it's not a similar consistency to ice cream keep going!

## How does it work?

Adding salt to ice lowers the freezing point of salt by a few degrees (freezing point depression). When salt is added to the ice in the outer bag, the ice (which is at 0°C) is suddenly above its freezing point, and starts to melt. Melting requires energy which in this case is taken from milk mixture in the inner bag, causing the milk to freeze!!





of droplets of fat from milk jumbled up with millions of tiny crystals of ice and pockets of air.