

Investigation 4: Making ice cream in a bag



Wear gloves to shake the ice bag – it gets really cold!

Recipe:

- Measure out 200ml of milk in a jug;
- Add a tablespoon of sugar and $\frac{1}{4}$ teaspoon of vanilla essence;
- Stir the sugar to dissolve it;
- Pour the mixture in the small zip bag and seal it;
- Half fill the large zip bag with ice cubes;
- Add 200g (4 tablespoons) of cooking salt;
- Put the small bag in with the ice and salt, and seal the large bag;
- Shake the large bag gently for about five minutes;
- Test the ice cream by squeezing the small bag to see if it is ready. If it is still liquid, shake again until it is set;
- When it is set take out the small bag and rinse off the salty water under a cold tap: and
- Eat immediately!

The science explained:

To turn the mixture into ice cream, you need to make the mixture really cold. Ice melts at 0°C which is not cold enough to make ice cream.

