Episode 8: Icy Ice Cream Experiment

In this very cool experiment, Michelle learns how different temperatures can help her make ice cream in a bag, using milk and ice cubes! To turn a mixture from a liquid to a solid, the temperature of the ingredients must be cold enough to freeze them.

Scientific concept: Liquid can change into a solid.
Science process skills: Measuring, predicting and observing.
Let's investigate: ***Can you make ice cream without a freezer?***

Materials

- 1 x cup milk
- 1 x cup cream
- 1 x teaspoon vanilla extract
- 12 x ice cubes
- 1 x tablespoon sugar
- Rock salt
- 2 x zip lock bags (1 x large and 1 x sandwich size)
- Oven mitts
- Bowl
- Fruit of your choice

Experiment procedure

1. Place ice cubes into a large resealable bag.
2. Tip the rock salt into the bag of ice.
3. Place an open sandwich bag in a bowl. Pour milk and cream into the bag.
4. Add sugar and vanilla extract to the sandwich bag and seal tightly.
5. Place the small sandwich bag inside the large bag full of ice. Wear oven mitts and shake the cold bag of ice for 15 minutes (or until ice has melted).
6. Take out the small sandwich bag and squeeze out the yummy ice cream into a bowl. The cold ice has turned the creamy, liquid mixture into something frozen and solid!
7. Top your homemade ice cream with chopped fruit. Enjoy!

Early Education links

Episode themes relate to EYLF Learning Outcomes 4.1, 4.2, 5.2 and 5.4. Help children recognise numbers and develop their mathematical understandings about formal units of measurement, by pouring the milk and cream into a measuring cup or jug. Encourage independence and enthusiasm for learning by inviting children to find materials in the kitchen, prepare toppings and have fun serving their yummy treat.

Follow-up learning

How To Make: Brainy Bites has healthy, delicious recipes like Riceball Spiders and Ladybird Crackers. Each 2 min episode incorporates numeracy concepts through stop motion magic.