

Suggested Procedure for Test It!

Part 1: Melting Point of Salt Water Ice

1. Create the following solutions:

Beaker A: 200 mL of water

Beaker B: 200 mL of water; add 20 g of salt

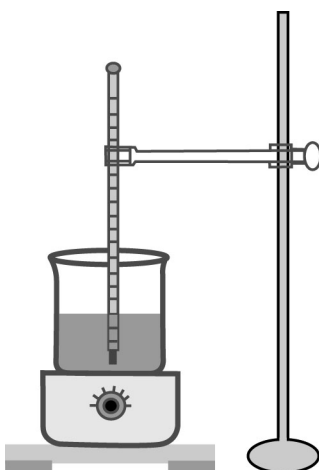
Beaker C: 200 mL of water; add 40 g of salt

Beaker D: 200 mL of water; add 60 g of salt

2. Label 4 ice cube trays A, B, C, and D. Fill each tray with the solutions above.
3. Put the trays in the freezer overnight or longer.
4. Your teacher will assign you to group A, B, C, or D. Take the ice cubes you are given. Crush them slightly by holding the bag on the lab table and smashing them with a hammer.
5. Put the crushed ice in a beaker and add a thermometer. Take a temperature reading from the thermometer every three minutes until you get the same reading three times in a row. Design a data table to record the temperature reading each time.
6. Write the melting temperature of your ice on the board. Use your results and the other groups' results to complete the graph in your student resource.
7. Save your beaker of salt water for Part 2.

Part 2: Boiling Point of Salt Water Solutions

8. Place the beaker on a hot plate that is unplugged.
9. Set up a support stand with a clamp and put the thermometer in so that the bottom bulb is in the middle of the salt water. The thermometer must not touch the sides or the bottom of the beaker.



10. Turn on the hot plate and heat the contents of the beaker. Record the temperature every three minutes until it reaches the boiling point. Design a data table to record the temperature reading each time.
11. Write the boiling temperature of your ice on the board. Use your results and the other groups' results to complete the graph in your student resource.