



Observing How Salt Affects Boiling Point of Water

Name: _____ Date: _____



QUESTION

How does adding salt to water affect its boiling point?



MATERIALS

- 2 small saucepans or beakers
- Water
- Table salt (sodium chloride)
- Stove or hot plate
- Thermometer (0–110 °C)
- Measuring spoon
- Stirring spoon
- Timer
- Heat-resistant mat or trivet



PROCEDURE

1. Fill both saucepans with 250 mL of water.
2. Leave one saucepan as plain water (no salt).
3. Add 1 teaspoon (about 5 g) of salt to the second saucepan. Stir until the salt dissolves.
4. Place one saucepan on the stove or hot plate. Insert the thermometer so the tip is in the water but not touching the bottom.
5. Heat the water and record the temperature when small bubbles form all over and the water boils steadily. This is the boiling point.
6. Turn off the heat and let the water cool.
7. Repeat steps 4–6 with the salt water.
8. Record your results in the table below.



SAFETY FIRST: Hot water and steam can burn. Ask an adult for help and be careful!



RESULTS

Test	Amount of Salt	Time to Boil (minutes)	Boiling Point (°C)	Observations
1. Plain Water	0 g (no salt)			
2. Salt Water	1 tsp (about 5 g)			



THINK ABOUT IT

1. Which water boiled at a higher temperature? _____
2. By how many degrees did the boiling point change? _____
3. Why do you think salt raises the boiling point of water? _____

