

Making salt lab



**ASSIGN
BUSTER**

Let's Make Salt Purpose: Could NaCl be made using NaHCO₃, hydrochloric acid, and a boiling chip? Hypothesis: If I combined NaHCO₃, hydrochloric acid, and a boiling chip I think it will form NaCl because when you balance the equation it makes a new chemical reaction. Materials needed: test tube cleaner, test tube, test tube tongs, hot plate, a scale, graduated cylinder, water, goggles, fire retardant glove, beaker, test tube holder, a scoopula, hydrochloric acid, sodium bicarbonate, soap, pipette, and a boiling chip.

Procedures:

- Clean your test tube with a test tube cleaner, soap, and water. Make sure the test tube is clean and dry.
- Place a boiling chip in the test tube and measure it.
- Add 1g of NaHCO₃(sodium bicarbonate) to the test tube with the scoopula, then measure.
- Take about 5mL of hydrochloric acid in your graduated cylinder. Using your pipette add the hydrochloric acid to the NaHCO₃. It will start to bubble, when the bubbling stops, don't add anymore acid.
- Once the bubbling stops, swirl what's inside the test tube to be sure everything mixes together.
- Place the test tube in a beaker with water. It will start to boil. Continue letting it boil until all liquid is evaporated out of the test tube.
- Once the test tube cools off measure what's inside the test tube.
- Place the test tube back inside the beaker on the hot plate for 2-3 minutes.
- Allow the test tube to cool and re-weigh it again.

Conclusion:

My hypothesis was correct because both substances together formed NaCl in the end. In the lab everything worked out right because in the end none of my masses were the same as I started with. It weighed 20g in the beginning and ended with 21g and the mass of NaCl 1g.