

October 16th 2015

Name: _____

TITLE: DOES SALT WATER SPEED UP THE BOILING RATE OF WATER?

Background Theory: *It is every chef's dream to speed up the rate at which water boils in order to speed up the cooking of food. Some people think that by adding salt to water will speed up the rate at which water boils, this lab is designed to prove that this is actually true.*

Hypothesis:

Do you think salt will speed up or slow down how long it takes to boil a beaker full of water?



Why or why not?

Materials (list them)

- STOPWATCH (PHONE)
- BUNSEN BURNER
- RETORT STAND
- MESH / GAUZE PAD

- WATER + SALT
- BEAKER (x 2)
- THERMOMETER
- TONGS
- GOGGLES
- MATCHES
- CLAMPS

Instructions: (what are the steps you took to do this lab?)

- 1.
- 2.
- 3.
- 4.
- 5.



Controlled Variables (what you keep the same in both beakers)

- AMOUNT OF WATER (60 mL)
 - TEMPERATURE OF FLAME
 - HEIGHT OF THE BEAKER
- SAME SIZE OF BEAKER

Independent Variable (what one thing have you changed in the two beakers you are testing?)

SALT

Dependent Variable (what are you measuring in each beaker?)

TEMPERATURE (RATE)

Data Table (see extra data table sheet)

*



Now draw a graph using the information provided to you in this lab!



Conclusion: What happened in your lab? What should have happened? Do some research at the following website: <http://mentalfloss.com/article/60046/does-adding-salt-water-make-it-boil-sooner>

Evaluation:

What went wrong (name at least 3 things)?

DUE NEXT CLASS!

How could you improve this lab if you were to do this next time?



