

Name: _____

Date: _____



“In Hot Water: Part II”



After doing the experiment with the black and clear water bottles last week, Ms. Sheffield began to wonder about another factor besides just the color of the bottle.

“ I wonder if it would make any difference if there was less water in the bottles? Doesn’t air heat up faster than water? I think the bottles would heat up quicker if they weren’t full.”

“Well,” said Mr. Baxter, “I don’t think having more air in the bottle would affect the temperature of the water. I think it the water would be the same temperature either way.”

What do you think? Does it matter if the bottle is full or not?

So far you have been given the following materials:

- Clear plastic water bottles with lids (different sizes)
- Black painted water bottles
- Water
- Windowsill
- Sunshine

You **do not** have to use all materials listed. Think carefully about what **other** tools or materials you may need to effectively conduct your experiment. Add any additional materials that you need to the list above.

Create an experimental design plan to see if Mrs. Sheffield or Mr. Baxter’s theory is correct.

My Hypothesis:

Variable I will change (Independent Variable):

Factors that I need to keep constant (stay the same)

Name: _____

Date: _____

Procedure:

How I will measure my results & record my data: