

Experiment 2 Post-Lab Sheet

Name:

Results (5pts): Provide the following, *based on your experimental measurements, not the accepted values in the table*. Be sure to provide units for all numbers.

Unknown liquid code: _____

Your measured value of boiling point , with uncertainty	
Measured range of melting point	
Solubility in water	
Measured range of density	
Identity of liquid	
Accepted value of boiling point from table	

Discussion

1. (2 pts) How different is your experimental boiling point from the accepted value? Is the accepted value within the stated experimental error range for this type of measurement?
2. (2pts) Does the boiling point measurement method seem to be accurate? Choose yes/no and support your choice. (Hint: at what maximum difference between your measured value and the accepted value would it be accurate?)
3. (2pts) How precise is the boiling point measurement method? (Not your data specifically.)
4. (2pts) Was the identification of your liquid definitive, or is there some doubt about which liquid it was? Why or why not?

Experimental (7pts): the “methods” section of a lab report or scientific paper

In a formal lab report, you include an “experimental” section, in which you describe what you did and observed using *past tense, passive voice* sentences. Here are some examples:

“Approximately 1 ml of liquid was placed in a small test tube and immersed in a dry ice-acetone bath.” “When the temperature reached 84 °C, a continuous flow of bubbles from the capillary tube was observed.” Using similar sentences, write an experimental section for this lab. The experimental may have sections for different measurements, but it should be in paragraphs, not a list. *Be as brief as you can.* Also, this is one place where you *don’t* need to worry about plagiarism! Scientists typically use standard language to describe their experiments, so similar procedures will be described by different authors using almost identical sentences. You can use the space below or attach sheets (typed and double-spaced is great!).