

Name \_\_\_\_\_

Section \_\_\_\_\_

Lab Instructor \_\_\_\_\_

Date \_\_\_\_\_

## EXPERIMENT 4 The Determination of Boiling Point

### RESULTS/OBSERVATIONS

#### A. Calibration of the Thermometer

Temperature in ice/water bath \_\_\_\_\_

Thermometer error at ice/water temperature \_\_\_\_\_

Temperature in boiling water \_\_\_\_\_

Barometric pressure \_\_\_\_\_

True boiling point of water at this pressure \_\_\_\_\_

Thermometer error in boiling point of water \_\_\_\_\_

#### B. Détermination of Boiling Point

Identification number of unknown liquid sample \_\_\_\_\_

First determination of boiling point \_\_\_\_\_

Second determination of boiling point \_\_\_\_\_

Third determination (if necessary) \_\_\_\_\_

Mean value for unknown boiling point \_\_\_\_\_

### QUESTIONS

1. What is meant by the *normal* boiling point of a substance?

\_\_\_\_\_  
\_\_\_\_\_

2. Food products such as cake mixes often list special directions for cooking the products in high-altitude areas. Why are special directions needed for such situations? Would a food take a longer or shorter time period to cook under such conditions? Why?

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