

NAME \_\_\_\_\_ DATE \_\_\_\_\_ SECTION \_\_\_\_\_

INSTRUCTOR \_\_\_\_\_ GRADE \_\_\_\_\_

### EXPERIMENT 5: REPORT FOR THE ANALYSIS OF COPPER IN A BRASS SAMPLE

#### DATA/RESULTS\*\*

##### I. PREPARATION OF STANDARD CURVE (Procedure B)

	Example	Solution 1	Solution 2	Solution 3
*1. Weight (g) $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ dissolved in 50.00 mL of solution	<u>1.248</u>	<u>1.000</u>	<u>2.000</u>	<u>3.000</u>
2. Molarity of $\text{Cu}^{+2}$ in the 50.00 mL of solution (mol/L)	<u>0.100</u>	_____	_____	_____
*3. Absorbance value obtained using the Spectronic 20	<u>0.110</u>	_____	_____	_____

##### II. ANALYSIS OF COPPER IN THE BRASS SAMPLE (Procedure A) SAMPLE NUMBER \_\_\_\_\_

	example	Trial 1	Trial 2
*1. Weight (g) of dry flask plus brass	<u>24.030</u>	_____	_____
*2. Weight (g) of dry flask	<u>23.134</u>	_____	_____
3. Weight (g) of brass	<u>0.896</u>	_____	_____
*4. Absorbance value obtained using the Spectronic 20	<u>0.310</u>	_____	_____
5. Molarity of $\text{Cu}^{+2}$ as read from the standard curve (mol/L)	<u>0.258</u>	_____	_____
6. Grams of copper	<u>0.819</u>	_____	_____
7. Percent copper in the brass sample	<u>91.4</u>	_____	_____
8. Average percent copper in the brass sample		_____	_____

#### CALCULATIONS

\*Numbers (items) with asterisks represent data taken in the lab, while the other numbers (items) were calculated from the lab data.

\*\*A graph of your standard curve must be submitted with the Data and Results form.