Report for Chem 101 Laboratory Exercise #6
Extraction of caffeine from Tea [1]

Using Microsoft Word, students are to insert responses in all yellow highlighted areas. It is recommended that the report be completed without changing font size, column width, row width, margins and highlights. The completed report must be uploaded to the Chem 101 lab Brightspace site as a .pdf file by the due date posted on Brightspace. All answers must be the student's own work without assistance from others. Only reports which are completed using the template will be marked.

Name: _Bree_ **Lab Section:** _B09_ **Quad:** _2_ **Date:** _Nov 24, 2022_

Abstract *(max. 3 lines)*

_The amount of caffeine in a cup of tea[1] is 0.062 grams or 2.16%. We used liquid-liquid extraction to find the percentage of Caffeine in a tea bag. _

Data/Results
Table 1. Experimental data and calculated values

Extraction and isolation	
Weight of tea leaves [1]	2.870 g
Weight of caffeine	0.062 g
Weight % caffeine in tea	2.160%
Lethal dose for a 700 g rat	8.333 cups

Algebraic Equation

Weight % of caffeine in tea = percentage=(weight of caffeine x 100)/weight of tea

Discussion *Respond to the following:*
Give one shortcoming of this experiment, not a personal error, that could contribute to an inaccurate value of caffeine that was in the teabag. (max 3 lines).
The tea leaves need to soak up the water and disperse the flavour the bags must be in mesh bags which cling onto some of the leaves not letting them fall out of the bag.

Conclusions
(max 1 line)
The percentage of caffeine in a tea bag is 2.16%.

References

1- Red Rose Orange Pekoe. Unilever Company. Toronto, Ontario M4W 3R2

Feedback Summary	max.
Pre-lab quiz: Are all responses correct?	4
Laboratory Notebook: Have ALL data, observations and procedures been recorded?	1
Report: Are all sections completed accurately? Is the abstract accurate and complete? Are responses in the Discussion correct? Does the conclusion only include the appropriate information? Are the References correctly formatted and cited?	3
Participation: Did the student come prepared, was time used well in lab and was student engaged in the experiment? Did the student show the email confirmation letter and request the TA to check their drawers for completeness before they left the lab?	1
Performance evaluation: Did student follow the safe practice guidelines throughout the whole lab period?	1
Total mark	10