Grading Rubric E

Name _____ Score _____ /40 _____% Grade_____

I. Introduction ____/10

Application	#	wgt	Exemplary (10)	At Standard (8)	In Progress (7)	Still Emerging (6)	No Evaluation (0)
Defining Problems	1a	*	Definition of problem or issue reflects a broad, insightful view (4 of 4) ❑ **Background Information** for Part I is summarized by saying what will be proven with each test ❑ **Background Information** for Part II is summarized by saying what will be proven with each test ❑ **Background Information** for Part III is summarized by saying what will be proven with each test ❑ **Background Information** for Part IV is summarized by saying what will be proven with each test	Definition of problem or issue is reasonable and concise (3 of 4)	Definition of problem has aspects that are vague or incomplete (2 of 4)	Overall definition of problem is vague or unreasonable (1 of 4)	No work shown for this section

II. Data ____/10

Application	#	wgt	Exemplary (10)	At Standard (8)	In Progress (7)	Still Emerging (6)	No Evaluation (0)
Interpreting Models	1b	*	Interprets visuals or models at a complex level (4 of 4) ❑ Data table for Part I: A data table with title and units was created to show which peaks were used to identify each of the 3 substances ❑ Data table for Part II: Caffeine Extraction Lab data with units is included to show the amount of caffeine able to be extracted from the coffee ❑ Data table for Part III: Distances traveled by each substance and the R_f values are shown for the known and the unknown drug; data table has title and units ❑ Data table for Part IV: Qualitative data from the pen chromatography is in a data table with a title	Interprets visuals or models at a general level (3 of 4)	Interpretation of visual or model contains errors that restrict understanding (2 of 4)	Shows fundamental errors in use and understanding of visual (1 of 4)	No work turned in for this section

III. Analysis—No Graph Needed

III. Analysis-Calculations ____/10

Application	#	wgt	Exemplary (10)	At Standard (8)	In Progress (7)	Still Emerging (6)	No Evaluation (0)
Problem Calculations	2a	*	All essential information is evident through well-organized work while justifying the solution (4 of 4) ❑ Part II: the calculations for the amount of caffeine in the student sample of 100mL of coffee are correct ❑ Part II: the calculations for the amount of caffeine that can be extracted from the 2240 g of coffee in the container are correct ❑ Part III: R_f value calculations are shown for the 3 substances TLC tested in the Drug Chromatography Lab	Most essential information is evident through organized work while leading to the solution (3 of 4)	Minimum information is evident through work with a solution present (2 of 4)	Work is extremely unorganized with no solution present (1 of 4)	No work shown for this section

			❑ Part III: R_f value calculations are shown for the unknown TLC tested in the Drug Chromatography Lab				

IV. Conclusions ____/10

Application	#	wgt	Exemplary (10)	At Standard (8)	In Progress (7)	Still Emerging (6)	No Evaluation (0)
Connecting Ideas	1d	*	Makes insightful connections between ideas or events that might not be obvious-abstract thinking evident (4 of 4) ❑ **Part I conclusion:** ALL of the substances from the IR Spectra are matched correctly and the correct substance is linked back to the correct unknown from PA #2: Chemical Analysis ❑ **Part II conclusion:** All questions are answered and suspect/data collection information from Part II is considered in the answers to show the amount of caffeine that can be extracted ❑ **Part III conclusion:** All questions are answered and suspect/data collection information from Part III is considered in the answers for which substances are in the unknown drug ❑ **Part IV conclusion:** All questions are answered and suspect/data collection information from Part IV is considered in the answers to show which pens on the suspects match the ink in the drug log book	Makes general, logical connections between ideas or events; mostly concrete in nature (3 of 4)	Makes superficial connections between ideas; thinking might be confused or incomplete (2 of 4)	Makes incorrect or no connections between ideas (1 of 4)	No work shown for this section