Grading Rubric C

Name _____ **Score _____ /40** **_____%** **Grade_____**

I. Introduction

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 in your own words ❑ **Background Information** for Part II is summarized in your own words ❑ **Background Information** for Part III is summarized in your own words ❑ **Background Information** for Part IV is summarized in your own words	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

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: Nitrate Soil is constructed to show the suspect # and the absorbance for that sample with units and labels where needed ❑ Data table for Part II: Shoeprint shows qualitative and/or quantitative data with units and labels where needed ❑ Data table for Part II: Shoeprint shows a match with the evidence envelope shoeprints (Evidence A-D) ❑ Correct **titles** are used for all data tables required for this assessment	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

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) ❑ Two Calculations using the equation for the slope of the line for **Part I: Nitrate Soil are shown** for any concentrations that match the crime scene and are complete, correct, and ALL WORK is included along with units for all numbers throughout calculation ❑ Three calculations are shown for **Part III: Bone Fragments** for	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

			finding the age of the bone fragments and are complete, correct, and ALL WORK is included along with units for all numbers throughout the calculation ❑ Calculations for **Part IV: Medical Tracer** for the reverse decay of the Barium isotope are shown to calculate the time frame for the exposure of the victim to the medical tracer ❑ Calculations for **Part IV: Medical Tracer** for the amount of medical tracer the victim was originally exposed to is complete, correct, and ALL WORK is included along with units for all numbers throughout the calculation.				

IV. Conclusions

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:** Which of the suspects were at the crime scene and how does the Spec-20/labquest data help prove this? ❑ **Part II conclusion:** What connections can be made between the crime scene shoeprints and those shoeprints of the suspects? ❑ **Part III conclusion:** Which of the bone fragments must belong to the victim and why? How can the other bone fragments be ruled out for belonging to the victim? ❑ **Part IV conclusion:** How does the medical tracer data help put a time frame together for the murder and what is the time frame? Who are the lead suspects at this point? Is there a motive yet?	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

Overall Report Formatting (Extra Credit-5 points)

Application	#	wgt	
Technology Applications	1c	*	Technology used is best available and appropriate for the required research, data representation, interpretation, and communication of results. ❑ Entire Lab Report is computer generated (5 points); including data tables and calculations typed using the computer