Name:	Name:	
Name:	Name:	
Name:	Name:	

Self Contained Ecosystem Lab Write Up-Rubric

Title Page		
Title Page-Title 0=Not present, 1=Present, 2=describes main points)	/2	
Title Page-Names of Students (0=Not present, 1=all students are listed, 2= all students are listed in alphabetical order by last name)	/2	
Title Page-Instructors Name (0=Not present, 1=Present)	/1	
Title Page-Lab Date (0=Not present or <3 dates, 1=All 3 dates are present)	/1	
Total Points	/6	
Abstract	'	
Abstract (0=Not present, 1=Exists, 2=Justification & examples)	/2	
Purpose (0=Not present, 1=Present, 2=No connections to "Real-Life", 3=Demonstrates higher level of thinking)	/3	
Key Results (0=Not present, 1=Present, 2=Demonstrates higher level of thinking)	/2	
Most significant point of discussion (0=Not present, 1=Present, 2=Demonstrates higher level of thinking)	/2	
Major Conclusion (0=Not present, 1=Present, 2= General, 3=Demonstrates higher level of thinking)	/3	
Word Count (0=Not present, 1= <100 words or >250, 2=100-149 words or 200-250 words, 3=150-200)	/3	
Total Points	/15	
Introduction	1	
Overall (0=Not present, 1=Exists, 2=1-2 Complete Paragraphs)	/2	
Why was this study performed? (0=Not present, 1=Present, 2=Demonstrates higher level of thinking	/2	
What knowledge already exists about this subject? (0=Not present, 1=Present, 2=Higher level of thinking	/2	
What is the specific purpose of the study? (0=Not present, 1=Present, 2= Higher level of thinking	/2	
Total Points	/8	
Materials		
Overall (0=Not present, 1=In bullets, 2=Organized)	/2	
Materials listed (0=None, 1=1-10 present, 2=11-20 present, 3=>20 present	/3	
Total Points	/5	
Procedures Overall	/2	
(0=Not present, 1=Step 1Step 2, 2=Organized) Steps Listed		
(0=None, 1=1-10 present, 2=11-20 present, 3=>20 present Total Points	/3	
Citation		
Citation In-Text (0=Not present, 1=present, 2=citations in works cited)	/2	
Work Cited	/2	
(1=1-2 references correctly, 2=-2 references correctly) Total Points	/4	
Claim		
Claim (0=Not present, 1=Exists, 2= higher level of thinking)	/2	
Claim Information (0=Not present, 1=Answers 1 "Big Idea", 2= Answers 2 "Big Idea"	/2	
Total Points	/4	

(0=Not present, 1=Step 1Step 2, 2=Organized) 72	Data			
(0=No graph, 1=<8 points, 2=>8 points, 3=All points & organized (1=1-2 reflections under pic, 2=3 reflection 3-Higher Level) (0=No graph, 1=<8 points, 2=>8 points, 3=All points & organized O ₂ Graph Reflection (1=1-2 reflections under pic, 2=3 reflection 3-Higher Level) (0=No graph, 1=<8 points, 2=>8 points, 3=All points & organized D ₂ Graph Reflection (1=1-2 reflections under pic, 2=3 reflection 3-Higher Level) (0=No graph, 1=<8 points, 2=>8 points, 3=All points & organized D ₃ H Graph Reflection (1=1-2 reflections under pic, 2=3 reflection 3-Higher Level) Temperature of Environment Graph Reflection (1=1-2 reflections under pic, 2=3 reflection 3-Higher Level) Temperature of Environment Graph Reflection (1=1-2 reflection under pic, 2=3 reflection 3-Higher Level) Temperature of Soil Graph (1=<8 points, 2=8 points, 3=All points & organized) Temperature of Soil Graph Reflection (1=1-2 reflections under pic, 2=3 reflection 3-Higher Level) Temperature of Water Graph Reflection (1=1-2 reflections under pic, 2=3 reflection 3-Higher Level) Temperature of Water Graph Reflection (1=1-2 reflections under pic, 2=3 reflection 3-Higher Level) Ammonia Levels Graph (1=<8 points, 2=>8 points, 3=All points & organized) Ammonia Levels Graph (1=<8 points, 2=>8 points, 3=All points & organized) Ammonia Graph Reflection (1=1-2 reflections under pic, 2=3 reflection 3-Higher Level) Pictures Reflection (1=1-2 reflections under pic, 2=3 reflection 3-Higher Level) Pictures Graph (1=<8 points, 2=>8 points, 3=All points & organized) Ammonia Graph Reflection (1=1-2 reflections under pic, 2=3 reflection 3-Higher Level) Pictures Graph (1=<8 points, 2=>8 points, 3=All points & organized) Ammonia Graph Reflection (1=1-2 reflections under pic, 2=3 reflection 3-Higher Level) Pictures Graph (1=<8 points, 2=>8 points, 3=3 po		/2		
(1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) (0=No graph, 1= <8 points, 2=>8 points, 3=All points & organized O2 Graph Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) (0=No graph, 1= <8 points, 2=>8 points, 3=All points & organized pH Graph Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Temperature of Environment Graph Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Temperature of Environment Graph Reflection (1=1-2 reflection under pic, 2=3 reflection 3=Higher Level) Temperature of Soil Graph Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Temperature of Soil Graph Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Temperature of Soil Graph Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Temperature of Soil Graph Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Temperature of Water Graph Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Ammonia Graph Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Ammonia Graph Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Nitrates Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Rivates Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Drawings of Soil Samples (1=1 picture, 2=2 picture, 3=3 pictures) Picture Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Drawings of Water Samples (1=1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Water Samples (1=1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Water Samples (1=1 Drawings of Soil Samples (1=1 Drawings of Soil Samples (1=1 Drawings of Water Samples) Reflection (1=1-2 reflections under draw, 2a=3 reflection 3=Higher Level) Total Points Reasoning Evidence (0=Not present, 1=Exists, 2=higher level of thinking) Collaim Information (1=1-2 reflections under draw, 2a=3 reflection 3=Higher Level) Total Po		/3		
(0=No graph, 1= <8 points, 2=>8 points, 3=All points & organized O_2 Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) PH Level Graph (0=No graph, 1= <8 points, 2=>8 points, 3=All points & organized PH Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Temperature of Environment Graph (1= <8 points, 2=>8 points, 3=All points & organized) Temperature of Environment Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Temperature of Soil Graph (1= <8 points, 2=>8 points, 3=All points & organized) Temperature of Soil Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Temperature of Water Graph (1= <8 points, 2=>8 points, 3=All points & organized) Temperature of Water Graph (1= <8 points, 2=>8 points, 3=All points & organized) Temperature of Water Graph (1= <8 points, 2=>8 points, 3=All points & organized) Temperature of Water Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Ammonia Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Ammonia Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Nitrates Level Graph (1= <8 points, 2=>8 points, 3=All points & organized) Nitrates Level Graph (1= <8 points, 2=>8 points, 3=All points & organized) Nitrates Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Prawings of Soil Samples (1= 1 prawings, 2=2 prawings, 3=3 prawings) Drawings of Soil Samples (1= 1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Soil Samples (1= 1 Drawings of Soil Samples (1= 1 Drawings of Water Samples (1= 1 Drawings of Points (1) Points Reasoning: Evidence (0=Not present, 1=Sentence form, 2=Has no reasons or examples) Produce (1= Exists, 2=Ine Examples, 3=Ine justification & examples) Reasoning: Evidence 2 (1= Exists, 2=Ine		/3		
(1=1-2 reflections under pic, 2= 3 reflection 3-Higher Level) (0=No graph, 1= <8 points, 2=>8 points, 3-All points & organized PH Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3-Higher Level) Temperature of Environment Graph (1= <8 points, 2=>8 points, 3-All points & organized) Temperature of Environment Graph (1= <8 points, 2=>8 points, 3-All points & organized) Temperature of Soil Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3-Higher Level) Temperature of Soil Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3-Higher Level) Temperature of Soil Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3-Higher Level) Temperature of Water Graph (1= <8 points, 2=>8 points, 3-All points & organized) Temperature of Water Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3-Higher Level) Ammonia Levels Graph (1= <8 points, 2=>8 points, 3-All points & organized) Ammonia Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3-Higher Level) Ammonia Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3-Higher Level) Nitrates Level Graph (1= <8 points, 2=>8 points, 3-All points & organized) Ammonia Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3-Higher Level) Pictures of System (1= 1 picture, 2=) pictures of System (1= 1 picture, 2=) pictures of System (1= 1 picture, 2=) prawings, 3=3 Drawings) Drawings of Soil Samples (1= 1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Soil Samples Reflection (1=1-2 reflections under pic, 2= 3 reflection 3-Higher Level) Drawings of Water Samples (1= 1 Drawings of Water Samples (1= 1 Drawings of Water Samples (1= 1 Drawings of Water Samples Reflection (1=1-2 reflections under draw, 2= 3 reflection 3-Higher Level) Total Points Reasoning: Reasoning: Evidence (0=Not present, 1=Exists, 2= higher level of thinking) (Data as Evidence (1= Picture, 2=) picture of Soil Register Level (1= Exists, 2= lne Examples, 3= lne justification & examples) Reasoning: Evidence 2 (/3		
(0=No graph, 1= <8 points, 2=>8 points, 3=All points & organized pH Graph Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Temperature of Environment Graph (1= <8 points, 2=>8 points, 3=All points & organized) Temperature of Environment Graph Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Temperature of Soil Graph (1= <8 points, 2=>8 points, 3=All points & organized) Temperature of Soil Graph Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Temperature of Water Graph Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Temperature of Water Graph Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Ammonia Levels Graph (1= <8 points, 2=>8 points, 3=All points & organized) Ammonia Graph Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Ammonia Graph Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Nitrates Level Graph (1= <8 points, 2=>8 points, 3=All points & organized) Nitrates Level Graph (1= <8 points, 2=>8 points, 3=All points & organized) Nitrates Reflection (1= 1-2 sent, 2=>3 sent, 3=>3 sent, 4 Higher Level) Pictures of System (1= 1-picture, 2=2 picture, 3=3 pictures) (1= 1-picture, 2=2 picture, 3=3 pictures) Drawings of Soil Samples (1= 1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Soil Samples Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Drawings of Soil Samples Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Drawings of Soil Samples Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Drawings of Soil Samples Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Drawings of Soil Samples Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Provention (1= (1= 2 picture, 2= 3 pictures) (1= picture, 2= 3 pictures)		/3		
Care		/3		
(1= <8 points, 2=>8 points, 3=All points & organized) Temperature of Environment Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Temperature of Soil Graph (1= <8 points, 2=>8 points, 3=All points & organized) Temperature of Soil Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Temperature of Water Graph (1= <8 points, 2=>8 points, 3=All points & organized) Temperature of Water Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Ammonia Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Ammonia Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Ammonia Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Nitrates Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Ritrates Level Graph (1= <8 points, 2=>8 points, 3=All points & organized) Nitrates Reflection (1=1-2 sent, 2=>3 sent, 3=>3 Sent, & Higher Level) Picture Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Drawings of Soil Samples (1= 1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Soil Samples (1= 1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Water Samples Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Drawings of Water Samples Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Drawings of Water Samples Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Claim Information (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Reasoning: Total Points Reasoning: Reasoning: Evidence (0=Not present, 1=Exists, 2=higher level of thinking) Claim Information (0=Not present, 1=Exists, 2=higher level of thinking) Reasoning: Evidence (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 2 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Conclusion (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Conclusion (1=Exists, 2=Inc Exa		/3		
Care		/3		
Temperature of Soil Graph (1= <8 points, 2=>8 points, 3=All points & organized) Temperature of Soil Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Temperature of Water Graph (1= <8 points, 2=>8 points, 3=All points & organized) Temperature of Water Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Ammonia Levels Graph ((1= <8 points, 2=>8 points, 3=All points & organized) Ammonia Levels Graph ((1= <8 points, 2=>8 points, 3=All points & organized) Ammonia Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Ammonia Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Nitrates Reflection (1= <8 points, 2=>8 points, 3=All points & organized) Nitrates Reflection (1= 1-2 sent, 2=>3 sent, 3=>3 Sent, & Higher Level) Pictures of System (1= 1 picture, 2=2 picture, 3=3 pictures) Picture Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Drawings of Soil Samples (1= 1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Soil Samples Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Drawings of Water Samples (1= 1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Water Samples Reflection (1=1-2 reflections under draw, 2=3 reflection 3=Higher Level) Drawings of Water Samples (1= 1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Water Samples Reflection (1=1-2 reflections under draw, 2=3 reflection 3=Higher Level) Total Points Reasoning Evidence Evidence Evidence (0=Not present, 1=Exists, 2= higher level of thinking) Claim Information (0=Not present, 1=Sentence form, 2=Has no reasons or examples) Reasoning: Evidence 2 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 2 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 2 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) (1=Exists, 2=Inc Examples, 3=Inc justification & examples) (1=Exists, 2=Inc Examples, 3=Inc justification & examples)	Temperature of Environment Graph Reflection	/3		
Temperature of Soil Graph Reflection	Temperature of Soil Graph	/3		
Temperature of Water Graph (1= <8 points, 2=>8 points, 3=All points & organized) Temperature of Water Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Ammonia Levels Graph ((1= <8 points, 2=>8 points, 3=All points & organized) Ammonia Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Nitrates Level Graph (1= <8 points, 2=>8 points, 3=All points & organized) Nitrates Reflection (1=1-2 sent, 2=>3 sent, 3=>3 Sent, & Higher Level) Pictures of System (1= 1 picture, 2=2 picture, 3=3 pictures) Picture Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Drawings of Soil Samples (1= 1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Soil Samples Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Drawings of Water Samples (1= 1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Water Samples (1= 1 Drawings, 2=2 Drawings, 3=3 Drawings) Claim Information (1=1-2 reflections under draw, 2= 3 reflection 3=Higher Level) Total Points Evidence Evidence (0=Not present, 1=Exists, 2= higher level of thinking) Claim Information (0=Not present, 1=Sentence form, 2=Has no reasons or examples) Reasoning Reasoning: Evidence 1 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 2 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 2 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Conclusion (1=Exists, 2=Inc Examples, 3=Inc justification & examples)	Temperature of Soil Graph Reflection	/3		
Temperature of Water Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Ammonia Levels Graph ((1=<8 points, 2=>8 points, 3=All points & organized) Ammonia Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Nitrates Level Graph (1=<8 points, 2=>8 points, 3=All points & organized) Nitrates Reflection (1=1-2 sent, 2=>3 sent, 3=>3 sent, & Higher Level) Pictures of System (1= 1 picture, 2=2 picture, 3=3 pictures) Picture Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Drawings of Soil Samples (1= 1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Soil Samples (1= 1 Drawings of Soil Samples (1= 1 Drawings of Water Samples (1= 1 Drawings of Water Samples (1= 1 Drawings of Water Samples (1= 1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Water Samples Reflection (1=1-2 reflections under draw, 2=3 reflection 3=Higher Level) Drawings of Water Samples Reflection (1=1-2 reflections under draw, 2=3 reflection 3=Higher Level) Claim Information (0=Not present, 1=Exists, 2= higher level of thinking) Claim Information (0=Not present, 1=Sentence form, 2=Has no reasons or examples) Pata as Evidence (0=Not present, 1=Sentence form, 2=Has no reasons or examples) Reasoning Reasoning Reasoning: Evidence 1 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 2 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 2 (1=Exists, 2=Inc Examples, 3=Inc justification & examples)	Temperature of Water Graph	/3		
Ammonia Levels Graph ((1= <8 points, 2=>8 points, 3=All points & organized) Ammonia Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Nitrates Level Graph (1= <8 points, 2=>8 points, 3=All points & organized) Nitrates Reflection (1= 1-2 sent, 2=>3 sent, 3=>3 Sent. & Higher Level) Pictures of System (1= 1 picture, 2=2 picture, 3=3 pictures) Picture Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Prawings of Soil Samples (1= 1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Soil Samples Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Drawings of Water Samples (1= 1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Water Samples (1= 1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Water Samples (1= 1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Water Samples (1= 1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Water Samples (1= 1 Drawings, 3=3 Drawings) Drawings of Water Samples Reflection (1=1-2 reflections under draw, 2a= 3 reflection 3=Higher Level) Total Points Evidence Evidence (0=Not present, 1=Exists, 2= higher level of thinking) Claim Information (0=Not present, 1=Sentence form, 2=Has no reasons or examples) Data as Evidence 0=Not present, 1=Sentence form, 2=Has no reasons or examples) Reasoning Reasoning Reasoning: Evidence (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 2 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 2 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 3 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Conclusion (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Total Points Total Points 73 14 15 15 16 17 17 18 18 18 19 18 18 18 19 18 18	Temperature of Water Graph Reflection	/3		
Ammonia Graph Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Nitrates Level Graph (1= <8 points, 2=>8 points, 3=All points & organized) Nitrates Reflection (1=1-2 sent, 2=>3 sent, 3=>3 Sent. & Higher Level) Pictures of System (1=1 picture, 2=2 picture, 3=3 pictures) Picture Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Picture Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Drawings of Soil Samples (1=1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Soil Samples Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Prawings of Water Samples (1=1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Water Samples (1=1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Water Samples Reflection (1=1-2 reflections under draw, 2= 3 reflection 3=Higher Level) Prawings of Water Samples (1=1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Water Samples Reflection (1=1-2 reflections under draw, 2=3 reflection 3=Higher Level) Total Points //3 Evidence Evidence (0=Not present, 1=Exists, 2= higher level of thinking) Claim Information (0=Not present, 1=Sentence form, 2=Has no reasons or examples) Data as Evidence 0=Not present, 1=<2 pieces of evidence, 2=>3 pieces of evidence) Pata as Evidence (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning Reasoning: Evidence 2 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 3 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 3 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 3 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Conclusion (1=Exists, 2=Sums up CER, 3= Makes "Real World" connections) Total Points	Ammonia Levels Graph	/3		
Nitrates Level Graph (1= <8 points, 2=>8 points, 3=All points & organized) Nitrates Reflection (1= 1-2 sent, 2=>3 sent, 3=>3 Sent. & Higher Level) Pictures of System (1= 1 picture, 2=2 picture, 3=3 pictures) Picture Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Drawings of Soil Samples (1= 1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Soil Samples Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Drawings of Water Samples (1= 1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Water Samples (1= 1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Water Samples Reflection (1=1-2 reflections under draw, 2a= 3 reflection 3=Higher Level) Total Points Assumption	Ammonia Graph Reflection	/3		
Nitrates Reflection (1=1-2 sent, 2=>3 sent, 3=>3 Sent. & Higher Level) Pictures of System (1=1 picture, 2=2 pictures, 3=3 pictures) Picture Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Drawings of Soil Samples (1=1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Soil Samples Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Drawings of Soil Samples Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Drawings of Water Samples (1=1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Water Samples Reflection (1=1-2 reflections under draw, 2a=3 reflection 3=Higher Level) Total Points Evidence Evidence (0=Not present, 1=Exists, 2= higher level of thinking) Claim Information (0=Not present, 1=Sentence form, 2=Has no reasons or examples) Data as Evidence 0=Not present, 1=Sentence form, 2=Has no reasons or examples) Data as Evidence 0=Not present, 1=Sentence form, 2=Has no reasons or examples) Reasoning Reasoning: Evidence 1 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 1 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 2 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 3 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 3 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Conclusion (1=Exists, 2=Sums up CER, 3= Makes "Real World" connections) Total Points // 4	Nitrates Level Graph	/3		
Pictures of System (1=1 picture, 2=2 picture, 3=3 pictures) Picture Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Drawings of Soil Samples (1=1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Soil Samples Reflection (1=1-2 reflections under pic, 2=3 reflection 3=Higher Level) Drawings of Water Samples (1=1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Water Samples (1=1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Water Samples Reflection (1=1-2 reflections under draw, 2=3 reflection 3=Higher Level) Total Points Evidence Evidence (0=Not present, 1=Exists, 2= higher level of thinking) Claim Information (0=Not present, 1=Exists, 2= higher level of thinking) Claim Information (0=Not present, 1=Sentence form, 2=Has no reasons or examples) Data as Evidence 0=Not present, 1=<2 pieces of evidence, 2=>3 pieces of evidence 0=Not present, 1=<2 pieces of evidence, 2=>3 pieces of evidence (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 1 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 2 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 3 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Conclusion (1=Exists, 2=Sums up CER, 3= Makes "Real World" connections) Total Points // 4	Nitrates Reflection	/3		
Picture Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Drawings of Soil Samples (1=1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Soil Samples Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Drawings of Water Samples Reflection (1=1-2 reflections under draw, 2=3 reflection 3=Higher Level) Drawings of Water Samples (1=1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Water Samples Reflection (1=1-2 reflections under draw, 2a=3 reflection 3=Higher Level) Total Points Revidence Evidence Evidence (0=Not present, 1=Exists, 2= higher level of thinking) Claim Information (0=Not present, 1=Sentence form, 2=Has no reasons or examples) Data as Evidence 0=Not present, 1=<2 pieces of evidence, 2=>3 pieces of evidence) Total Points Reasoning Reasoning: Evidence 1 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 2 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 3 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 3 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Conclusion (1=Exists, 2=Sums up CER, 3= Makes "Real World" connections) Total Points /3	Pictures of System	/3		
Drawings of Soil Samples (1= 1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Soil Samples Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Drawings of Water Samples (1= 1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Water Samples Reflection (1=1-2 reflections under draw, 2= 3 reflection 3=Higher Level) Total Points Evidence Evidence (0=Not present, 1=Exists, 2= higher level of thinking) Claim Information (0=Not present, 1=Sentence form, 2=Has no reasons or examples) Data as Evidence O=Not present, 1=<2 pieces of evidence, 2=>3 pieces of evidence) Total Points Reasoning Reasoning: Evidence 1 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 2 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 3 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Conclusion (1=Exists, 2=Sums up CER, 3= Makes "Real World" connections) Total Points /3 Total Points /4	Picture Reflection	/3		
Drawings of Soil Samples Reflection (1=1-2 reflections under pic, 2= 3 reflection 3=Higher Level) Drawings of Water Samples (1= 1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Water Samples Reflection (1=1-2 reflections under draw, 2a= 3 reflection 3=Higher Level) Total Points Evidence Evidence (0=Not present, 1=Exists, 2= higher level of thinking) Claim Information (0=Not present, 1=Sentence form, 2=Has no reasons or examples) Data as Evidence 0=Not present, 1=<2 pieces of evidence, 2=>3 pieces of evidence) Reasoning Reasoning: Evidence 1 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 2 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 3 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Conclusion (1=Exists, 2=Sums up CER, 3= Makes "Real World" connections) Total Points /3 Total Points	Drawings of Soil Samples	/3		
Drawings of Water Samples (1= 1 Drawings, 2=2 Drawings, 3=3 Drawings) Drawings of Water Samples Reflection (1=1-2 reflections under draw, 2a= 3 reflection 3=Higher Level) Total Points Evidence Evidence (0=Not present, 1=Exists, 2= higher level of thinking) Claim Information (0=Not present, 1=Sentence form, 2=Has no reasons or examples) Data as Evidence 0=Not present, 1=<2 pieces of evidence, 2=>3 pieces of evidence) Reasoning Reasoning: Evidence 1 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 2 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 3 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Conclusion (1=Exists, 2=Sums up CER, 3= Makes "Real World" connections) Total Points /3 Total Points	Drawings of Soil Samples Reflection	/3		
Drawings of Water Samples Reflection (1=1-2 reflections under draw, 2a= 3 reflection 3=Higher Level) Total Points Evidence Evidence (0=Not present, 1=Exists, 2= higher level of thinking) Claim Information (0=Not present, 1=Sentence form, 2=Has no reasons or examples) Data as Evidence 0=Not present, 1=<2 pieces of evidence, 2=>3 pieces of evidence) Total Points Reasoning Reasoning: Evidence 1 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 2 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 3 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Conclusion (1=Exists, 2=Sums up CER, 3= Makes "Real World" connections) Total Points /3 Total Points	Drawings of Water Samples	/3		
Total Points /68 Evidence Evidence /2 (0=Not present, 1=Exists, 2= higher level of thinking) /2 Claim Information (0=Not present, 1=Sentence form, 2=Has no reasons or examples) /2 Data as Evidence /2 0=Not present, 1=<2 pieces of evidence, 2=>3 pieces of evidence) /6 Reasoning Reasoning: Evidence 1 /3 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) /3 Reasoning: Evidence 2 /3 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) /3 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) /3 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) /3 Conclusion /3 Total Points /4	Drawings of Water Samples Reflection	/3		
Evidence (0=Not present, 1=Exists, 2= higher level of thinking) Claim Information (0=Not present, 1=Sentence form, 2=Has no reasons or examples) Data as Evidence 0=Not present, 1=<2 pieces of evidence, 2=>3 pieces of evidence) Total Points Reasoning Reasoning: Evidence 1 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 2 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 2 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Conclusion (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Conclusion (1=Exists, 2=Sums up CER, 3= Makes "Real World" connections) Total Points /2 /2 /3 /3 Total Points /4	Total Points	/68		
Claim Information (0=Not present, 1=Exists, 2= higher level of thinking) Claim Information (0=Not present, 1=Sentence form, 2=Has no reasons or examples) /2 Data as Evidence (0=Not present, 1=<2 pieces of evidence, 2=>3 pieces of evidence) /2 Total Points /6 Reasoning Reasoning: Evidence 1 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) /3 Reasoning: Evidence 2 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) /3 Reasoning: Evidence 3 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) /3 Conclusion (1=Exists, 2=Sums up CER, 3=Makes "Real World" connections) /3 Total Points /4	Evidence	/2		
Data as Evidence 0=Not present, 1=Sentence form, 2=Has no reasons or examples) Data as Evidence 0=Not present, 1=<2 pieces of evidence, 2=>3 pieces of evidence) Reasoning Reasoning: Evidence 1 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 2 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 2 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 3 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Conclusion (1=Exists, 2=Sums up CER, 3= Makes "Real World" connections) Total Points /4	Claim Information			
Conclusion (1=Exists, 2=Sums up CER, 3= Makes "Real World" connections) Conclusion (1=Exists, 2=Sums up CER, 3=Makes "Real World" connections) Conclusion (1=Exists, 2=Sums up CER, 3=Makes "Real World" connections) Conclusion (1=Exists, 2=Sums up CER, 3=Makes "Real World" connections) Conclusion (1=Exists, 2=Sums up CER, 3=Makes "Real World" connections) Conclusion (1=Exists, 2=Sums up CER, 3=Makes "Real World" connections) Conclusion (1=Exists, 2=Sums up CER, 3=Makes "Real World" connections) Conclusion (1=Exists, 2=Sums up CER, 3=Makes "Real World" connections) Conclusion (1=Exists, 2=Sums up CER, 3=Makes "Real World" connections) Conclusion (1=Exists, 2=Sums up CER, 3=Makes "Real World" connections) Conclusion (1=Exists, 2=Sums up CER, 3=Makes "Real World" connections) Conclusion (1=Exists, 2=Sums up CER, 3=Makes "Real World" connections) Conclusion (1=Exists, 2=Sums up CER, 3=Makes "Real World" connections) Conclusion (1=Exists, 2=Sums up CER, 3=Makes "Real World" connections) Conclusion (1=Exists, 2=Sums up CER, 3=Makes "Real World" connections) Conclusion (1=Exists, 2=Sums up CER, 3=Makes "Real World" connections) Conclusion (1=Exists, 2=Sums up CER, 3=Makes "Real World" connections) Conclusion (1=Exists, 2=Sums up CER, 3=Makes "Real World" connections) Conclusion (1=Exists, 2=Sums up CER, 3=Makes "Real World" connections) Conclusion (1=Exists, 2=Sums up CER, 3=Makes "Real World" connections) Conclusion (1=Exists, 2=Sums up CER, 3=Makes "Real World" connections) Conclusion (1=Exists, 2=Sums up CER, 3=Makes "Real World" connections) Conclusion (1=Exists, 2=Sums up CER, 3=Makes "Real World" connections) Conclusion (1=Exists, 2=Sums up CER, 3=Makes "Real World" connections) Conclusion (1=Exists, 2=Sums up CER, 3=Makes "Real World" connections) Conclusion (1=Exists, 2=Sums up CER, 3=Makes "Real World" connections) Conclusion (1=Exists, 2=Sums up CER, 3=Makes "Real World" connections) Conclusion (1=Exists, 2=Sums up CER, 3=Makes "Real World" connections)	Data as Evidence			
Reasoning: Evidence 1 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 2 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 3 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Conclusion (1=Exists, 2=Sums up CER, 3= Makes "Real World" connections) Total Points /4				
(1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 2 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 3 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Conclusion (1=Exists, 2=Sums up CER, 3= Makes "Real World" connections) Total Points /4				
(1=Exists, 2=Inc Examples, 3=Inc justification & examples) Reasoning: Evidence 3 (1=Exists, 2=Inc Examples, 3=Inc justification & examples) Conclusion (1=Exists, 2=Sums up CER, 3= Makes "Real World" connections) Total Points /4	(1=Exists, 2=Inc Examples, 3=Inc justification & examples)	/3		
(1=Exists, 2=Inc Examples, 3=Inc justification & examples) Conclusion (1=Exists, 2=Sums up CER, 3= Makes "Real World" connections) Total Points /4	(1=Exists, 2=Inc Examples, 3=Inc justification & examples)	/3		
(1=Exists, 2=Sums up CER, 3= Makes "Real World" connections) Total Points /4	(1=Exists, 2=Inc Examples, 3=Inc justification & examples)	/3		
		/3		
Total points from Rubric / 125	Total Points Total points from Rubric			
Total score /5 /25				