Name: _____ Date: _____ Per: _____

Online BioLab: Carbon Transfer through Snails and Elodea

Go the to the Classzone website: http://www.classzone.com/cz/books/bio_07/book_home.htm and use the pull down menu to find Chapter 4. Under the "*labs*" heading, click on '*Virtual Lab: Carbon Transfer Through Snails and Elodea"*

Objective: To understand how carbon and oxygen cycles are related.

Problem: _____
_____

Explore: click on each object to become familiar with its purpose. Record the function of each object in the space provided. (You cannot move on in the lab until you complete this section)

Materials list	Function
Beaker of Bromthymol Blue solution (BTB)	
Pond Snails	
Elodea	
Test Tubes	
Grow Lights	
Test Tube Rack Cover	
CO2 – O2 cycle poster	
Color Key	

Hypothesis: _____
_____

Procedure: Read and follow the procedure as instructed. You will record your information on this lab sheet, but you must also record something on the virtual lab book in order to be able to move to the next section. You must do two different experiments for this lab.

EXPERIMENT 1:
Dependent Variable:

Independent Variable:

Control:

Table #1: Initial plan for each test tube (fill out as many as you are using)

TEST TUBE	SET UP	TEST TUBE	SET UP
# 1		# 5	
# 2		# 6	
# 3		# 7	
# 4		# 8	

Table #2: Prediction and Results –

Test Tube #	Contents	Starting Color	Predicted End Color	Actual End Color

EXPERIMENT 2:

Dependent Variable:

Independent Variable:

Control:

Table #1: Initial plan for each test tube (fill out as many as you are using)

TEST TUBE	SET UP	TEST TUBE	SET UP
# 1		# 5	
# 2		# 6	
# 3		# 7	
# 4		# 8	

Table #2: Prediction and Results –

Test Tube #	Contents	Starting Color	Predicted End Color	Actual End Color

Analysis: Answer all analysis questions in complete sentences. You did not need to record anything in the virtual lab book for this section.

1. What were your experimental designs? What is the relationship between snails and Elodea?

2. Why did the color of the bromthymol blue change?

3. What was the importance of a control in your experiment? What would you conclude if the color of the solution in the control changed?

4. When you began the experiment, was there CO_2 in the water? Explain how you know.

5. In the test tubes that contained Elodea, where did the CO_2 go?

6. Which gas did the snails release? What observation supports this inference?

7. Base on the results of your experiments; explain why you need to add the Elodea to your snail aquarium.