Photosynthesis Lab

Design an experiment to determine how various factors affect the rate of photosynthesis.

1. Identify the 4 variables that can be adjusted within the simulation.

2. What is the substance that is measured in the simulation? Explain why this is the substance measured.

3. Identify 4 testable questions that can be answered using the simulation

4, Select one of the testable questions for the following series of questions.

a) What is the independent variable in the experiment?

b) What is the dependent variable in the experiment?

c) What variables are controlled (ie. kept constant in the experiment)

d) Write a hypothesis using the "If...then….because….." structure

5. Considering the method design.

a) How many different settings for the independent variable should be evaluated? Why is it important to test a range of setting of the independent variable in the experiment?

b) How is the simulation not like a realistic experimental design?

c) What would some of the challenges be of conducting this experiment in the classroom? What sources of error might be experienced in a classroom setting?

6. Making observations

Trial	1	2	3	4	5	6	7	8

7. Graph the data.

8. Making Conclusions

Argument

Our Claim	
Our Evidence	Our Justification of the Evidence (Evaluation of the strength of evidence)