

Title: Watching Photosynthesis

name _____

Purpose: To observe the absorption of carbon dioxide as a evidence of photosynthesis.

Materials: two large test tubes, elodea, bromothymol blue solution, stoppers, beaker, light source, straw, test tube rack, ruler

Procedure:

1. Get the amount of Bromothymol Blue solution suggested by your teacher. Blow through the straw until the color changes to yellowish-green. It should be the same shade as the control in the front of the room. Fill a test tube with this solution.
2. Place the elodea in this "test" tube and stopper.
3. Fill the other tube with the original blue solution and stopper it. It is the control tube.
3. Place both tubes in a beaker or test tube rack.
4. Place 6 inches from a light. Turn on the light and start timing.
5. Stop timing when the color in the tubes matches.
6. Record the time and the number of watts in your light bulb.

Prediction: Which bulb will go the fastest?

Data:

time start: _____ time finish: _____

watts: _____

Analysis:

1. What amount of watts was the fastest? slowest?
2. What gas makes the bromothymol blue yellow?
3. What makes it turn blue?
4. What gas did elodea make in the light?
5. Write the equation for photosynthesis:
6. What part of it did you prove today?

Conclusion: