Name: _____

Does Photosynthesis Need Light?

Hypothesis:

Variables:

Independent Variable: what are you changing?

Dependent Variable: what are you measuring?

Procedure:

You will follow your own procedure for where and how to put the plants. Follow the following procedures to use the carbon dioxide indicator, BTB.

Once you have set up both test tubes (make sure to label your test tube with your names):

1. Place ~15 drops of Bromothymol blue into each test tube. (the color of the water should be visibly blue)
2. Using a straw, blow into the test tube until the color changes to yellow
    - *A color change in the BTB will tell us if there is carbon dioxide in the water. If there is not carbon dioxide in the water (it's blue again) it means the plant did photosynthesis.*

We will leave our test tubes until next class.

Description of procedure: What did you do with your test tubes and what was your rational for doing that?

Results:

What did you find? Draw a picture of your test tubes!

Conclusion: (Answer in your OWN complete sentences)

Was your hypothesis supported? **Why or Why not?**

Do plants need light for photosynthesis? **Why or Why not?**

Write 3-5 sentences about your experiment. How did what you changed show you how photosynthesis works? Describe any sources of error in your experiment, how would you do it differently next time?