1. Write the chemical equation for photosynthesis. Label the reactants (used). Label the products (created).
2. This week, we combined NaHCO3 and H2O together and added it to the syringe with the leaf discs. What process was supposed to happen after you put your syringe into the light?
3. Why did we need to add the NaHCO3 solution to the leaf discs?
4. Compare the following rates of photosynthesis:

**0.014 discs/sec 0.034 discs/sec**

Which of the above situations happened outside (strong light) and which one happened under an artificial light (weak light) source? *Consider which rate is faster….*

**Justify** your answer

1. How do you know that photosynthesis did or did not happen in your syringe? **Explain**.
2. Elodea is a water plant. If you put one tank with water and elodea into a dark cabinet and put another tank of water and elodea under a light, what would you see? What would indicate that photosynthesis was happening or not? **Draw a picture of this set up and then answer the two questions.**
3. Is growth of a plant evidence for photosynthesis? **Explain**.
4. How did the lack of sunlight (it was cloudy) change the rate of photosynthesis?
5. Design an investigation to explore photosynthesis. This investigation should manipulate one reactant of photosynthesis. Explain how you will measure the change in products or rate of product production.
6. **GQ 2**: How do organisms obtain the energy they need to function and grow?