**Greenhouse Biology Project**

Many of you guys want to raise your grade, but the tests and quizzes are pulling you down. I get that- testing isn’t for everyone. So I’ve designed this assignment to (hopefully) boost your grade! It’s going to be worth 50 formal points and is due on **Friday, November 20th**. This is not extra credit, everyone is required to complete this project; however, you may receive bonus points if you go above and beyond what this project asks. In other words, show me that you spent time and energy on this assignment and I will award you with extra points.

I **CANNOT** and **WILL NOT** accept late work.

Choose ***ONE*** of the following:

1. Write a children’s book that describes one of the following processes:
   1. Photosynthesis and cell respiration
   2. DNA replication and mitosis/meiosis
   3. Protein synthesis
   4. Scientific method

Make sure it is illustrated and properly defines vocabulary.

1. Research your favorite fruit or vegetable. Create a brochure, poster, Powerpoint, or flyer that describes the plant and it’s functions. Make sure to address the following questions:
   1. Which macromolecules compose the plant (lipids, nucleic acids, carbohydrates, protein)?
   2. How does the plant obtain food/nutrients/water?
      1. Describe photosynthesis and cell respiration
   3. How does the plant get rid of waste?
   4. In what environment can the plant be found?
   5. How is it harvested?
   6. What makes this a fruit or vegetable?
   7. Is it a GMO?
2. Compare a plant in the rainforest and the desert. Write a short essay (minimum length: 1 page) that answers the following questions:
   1. How does the plant in the rainforest live with so much rainfall? What adaptations has it developed?
   2. How does the plant in the desert live without rainfall? What adaptations has it developed?
   3. What are some similarities between these plants? Differences?
   4. How do the appearances of the plants depend on their environment?
   5. What is the typical lifespan of each plant?
3. Choose one of the following topics:
   1. Plant hybridization (interbreeding between 2 plants)
   2. Plant mutations
   3. Genetically modified organisms (plants only)

Create a video, powerpoint, song, or newspaper article that describes the topic and

provides real life examples. Explain how these events occur/are created and how they

differ from “normal” plant growth. (Minimum length: 1 page)

5. Design a board game that practices one of the following mechanisms:

1. Photosynthesis
2. Cell Respiration
3. Protein Synthesis
4. DNA Replication
5. Mitosis/Meiosis

Include all necessary game pieces and directions on how to play.

**Total Points:** 50 formal

**Due Date:** November 20th

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