



Mr. Silluzio
Biology Lesson Plan
Date:

Topic: Photosynthesis and Cellular Respiration: Cam and C4 Cycles

Summary: After a whole class review of biochemical cycles, oxidation reduction reactions, the light reactions and Calvin cycle, plant adaptations to high temperature and low humidity conditions are explained (C4 and Cam).

Students then work independently completing a lab report.

Goals/Objectives:

- **Be able to define and explain biochemical cycles the light reactions and Calvin Cycles and be able to list products and reactants of each.**
- **Understand the anatomy of a typical plant leaf, stomata, mesophyll cells and bundle sheath cells.**
- **Understand the role of pep carboxylase in C4 and Cam alternative pathways.**

Corresponding Learning Standards:

Time Required: 1 80 minute period

Prerequisite Knowledge: Complete understanding of the Calvin Cycle and function of enzymes in order to understand the function of pep carboxlyase.

Homework: Chapter Guided Readings

Complete leaf disk lab report

Accommodations: All notes, assignments and due dates are available online.