

Name: _____ Period: _____ Date: _____

Beyond Regular Photosynthesis...

C3 Photosynthesis

What does **Carbon Fixation** mean?

Explain Carbon fixation in “regular” photosynthesis. How is it fixated? Into what is it fixated?

How do plants exchange gasses with the environment? What part of their anatomy helps with it?

Photorespiration

Why is it called **photorespiration**?

Why is the detrimental to the plant?

Why do scientists believe this exists in plants?

What are benefits to photorespiration?

C4 Photosynthesis

Why are they called **C4** Plants?

What are some **examples** of C4 plants?

What is unique about the **leaf anatomy** of C4 plants? Be sure to name the types of cells and what occurs in each.

How are C4 plants **different** from C3 plants?

Draw and label simple diagram of how the processes are divided within the **leaf** of a C4 plant.

What is the purpose of the C4 plant?

CAM Plants

What does **CAM** stand for?

Discuss the activity of the **stomata** in CAM plants. How does this differ from other plants? Why is the purpose of this activity?

What role does the **acid** play in photosynthesis?

What is the purpose of CAM photosynthesis?