



# Academic Notes

TOPIC: \_\_\_\_\_ Photosynthesis and Melvin Calvin \_\_\_\_\_

<b>DEFINE</b> Base your definition on: <ul style="list-style-type: none"><li>• what it <i>does</i></li><li>• what it <i>is</i></li><li>• what it's made from</li><li>• what it <i>means</i></li></ul>	Photosynthesis is the process by which plants create carbohydrates and oxygen from carbon dioxide and water, using the energy of sunlight.
<b>SUMMARIZE</b> Be sure that you: <ul style="list-style-type: none"><li>• synthesize different events and information</li><li>• include only essential events, ideas, or info</li></ul>	The conditions necessary for photosynthesis to take place had been known for nearly two centuries, as had the end products of the process. But the intermediate processes were a mystery. Calvin discovered and explained those processes.
<b>SERIALIZE</b> Be sure to: <ul style="list-style-type: none"><li>• include key events or moments in the sequence</li><li>• organize events or data to show how one event or action leads to another</li></ul>	
<b>CLASSIFY</b> Be sure to: <ul style="list-style-type: none"><li>• create useful categories into which all info can be organized</li><li>• establish criteria to use when evaluating and organizing information</li></ul>	Photosynthesis research, science history, scientific research, important figures in science.
<b>COMPARE</b> Be sure to: <ul style="list-style-type: none"><li>• identify and assess key similarities and differences based on:<ul style="list-style-type: none"><li>• importance</li><li>• behavior</li><li>• quality</li><li>• function</li></ul></li></ul>	The discovery of the photosynthesis process reminds me of the process the Curie's used in the discovery of radiation.
<b>ANALYZE</b> Be sure to: <ul style="list-style-type: none"><li>• consider what the text/ results mean based on critical reading or observation</li><li>• interpret from multiple perspectives</li></ul>	Calvin was able to discover the intermediate processes by introducing carbon-14 (a good tracer) into a flask containing green algae in suspension. He then used a second technique, paper chromatography, to identify the radioactive tracers. In this technique, a mixture is spread by solvents along a sheet of filter paper.

