

Academic Notes

TOPIC: Photosynthesis and Melvin Calvin

	·				
DEFINE					
Base your definition on:					
• what it does	Photosynthesis is the process by which plants create carbohydrates and oxygen from carbon dioxide and water, using the energy of sunlight.				
• what it is					
what it's made from					
• what it <i>means</i>					
SUMMARIZE					
Be sure that you:					
synthesize different	The conditions necessary for photosynthesis to take place had been known for nearly two				
events	centuries, as had the end products of the process. But the intermediate processes were a mystery. Calvin discovered and explained those processes.				
and information					
 include only essential 					
events, ideas, or info					
SERIALIZE					
Be sure to:					
 include key events or 					
moments in the sequence					
organize events or data					
to show how one event					
or action leads to another					
CLASSIFY					
Be sure to:					
create useful categories					
into which all info can be	Photosynthesis research, science history, scientific research, important figures in science.				
organized					
establish criteria to use					
when evaluating and					
organizing information					
COMPARE					
Be sure to:					
 identify and assess key 					
similarities and	The discovery of the photosynthesis process reminds me of the process the Curie's used in				
differences based on:	the discovery of radiation.				
• importance					
• behavior					
• quality					
• function					
ANALYZE					
Be sure to:	Calvin was able to discover the intermediate processes by introducing carbon-14 (a good				
consider what the text/	, , , , , , , , , , , , , , , , , , , ,				
results mean based on	tracer) into a flask containing green algae in suspension. He then used a second				
critical reading or	technique, paper chromatography, to identify the radioactive tracers. In this technique, a				
observation	mixture is spread by solvents along a sheet of filter paper.				
• interpret from multiple					
perspectives					