

The UbD Template, Version 2.0

Time Frame:	Unit Title: Photosynthesis-Plants' greatest gift	Course Name: Grade 7 science
Stage 1 - Desired Results		
Established Goals To identify products and reactants of photosynthesis To recognize that plants are critical to life Illustrate the relationships between photosynthesis and light MS LS 1-6 Design a scientific explanation based on evidence for the role of photosynthesis MS LS 1-7 Develop a model to demonstrate how food is rearranged through chemical reactions MS LS 2-3 Develop a model to demonstrate the cycling of matter and the flow of energy between living and non living things	Transfer	
	<i>Students will be able to independently use their learning to...</i> <i>Teach another student the process of photosynthesis.</i> <i>Developing and Using Models.</i> <i>Analyzing and Interpreting Data.</i> <i>Conducting Explanations.</i>	
	Meaning	
	UNDERSTANDINGS <i>Organisms on earth rely on photosynthesis</i> <i>Every organism on earth is an important part of the food chain/web</i> <i>The sun is the ultimate source of energy on earth</i>	ESSENTIAL QUESTIONS What if the sun was no longer able to shine? What would happen if all the plants on earth became extinct? What is the relationship between plants and animals in the ecosystem?
	Acquisition	
	<i>Students will know...</i> <i>How to Describe photosynthesis</i> <i>List the reactants of photosynthesis</i> <i>Explain where photosynthesis takes place in the cell</i> <i>Illustrate the process of photosynthesis</i>	Students will be skilled at... Designing a method of teaching another student the process of photosynthesis

	<i>Vocabulary:</i> <i>Prokaryotic</i> <i>Chloroplast</i> <i>Photosynthesis</i> <i>Organelle</i> <i>Chlorophyll</i> <i>Glucose</i> <i>Stroma</i> <i>Aerobic</i> <i>Microorganism</i> <i>Molecule</i> <i>Carbon Dioxide</i> <i>Oxygen</i> <i>Reaction</i> <i>Compound</i> <i>Chemical</i>	
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Stage 2 - Evidence	
Evaluative Criteria	Assessment Evidence
	PERFORMANCE TASK(S) <i>Illustrating photosynthesis: comic, children's story, storyboard</i>
	OTHER EVIDENCE:

Stage 3 Learning Plan	
<p><i>Summary of Key Learning Events and Instruction</i></p> <p><i>Explanation of fall leaves turning</i> <i>Review the video on photosynthesis</i> <i>Teach and review the steps in photosynthesis</i> <i>Design a lesson to teach the process to another student</i></p>	

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