

## Unit 4: Plant Systems and Processes

<b>Standard:</b> 7.5 A: Recognize that radiant energy from the Sun is transformed into chemical energy through the process of photosynthesis.	
<b>Content (nouns):</b> What students need to know? <ul style="list-style-type: none"><li>● Radiant Energy</li><li>● Chemical Energy</li><li>● Photosynthesis</li></ul>	<b>Skills (verb):</b> What students need to be able to do? <ul style="list-style-type: none"><li>● Recognize</li></ul>
<b>Student Learning Targets:</b> (I can... Statements. These become daily lessons.) <ul style="list-style-type: none"><li>● I can recognize that radiant energy from the Sun is transformed into chemical energy through the process of photosynthesis.</li><li>● I can define radiant and chemical energy</li><li>● I can define photosynthesis.</li><li>● I can recognize the process of photosynthesis in plants.</li></ul>	<b>DOK:</b>
<b>Learning Target Misconceptions:</b> <ul style="list-style-type: none"><li>● Mistaking radiant energy for light energy.</li></ul>	

4	<p><b>Exceeding</b> (Student understanding and application extends beyond the intent of the standard.)</p>	<ul style="list-style-type: none"> <li>● They can illustrate and explain how energy transfers are taking place through the process of photosynthesis and how it applies to various aspects of everyday life. <ul style="list-style-type: none"> <li>○ Students are able to give details for how plants are able to go through photosynthesis in man-made ways.</li> </ul> </li> </ul>
3	<p><b>Ready</b> (If there is a mistake in student evidence, the student requires no additional instruction to correct his or her thinking.)</p>	<ul style="list-style-type: none"> <li>● Students can recognize that radiant energy from the Sun is transformed into chemical energy through the process of photosynthesis. <ul style="list-style-type: none"> <li>○ Describing and showing the entire process of photosynthesis and specific parts of the transfer of energy either in the form of the chemical equation or through a graphic organizer.</li> <li>○ Students can explain that the process of photosynthesis is occurring in chloroplast and that chemical energy is glucose</li> </ul> </li> </ul>
2	<p><b>Close</b> (The student requires intervention for part of the standard, but he or she clearly understands another part of the standard.)</p>	<ul style="list-style-type: none"> <li>● They can describe there is a change in the process of photosynthesis, but cannot determine the specific change of energy taking place.</li> </ul>
1	<p><b>In Need of Support</b> (The student needs remediation or intervention.)</p>	<ul style="list-style-type: none"> <li>● They cannot identify or recognize the process or changes taking place in photosynthesis.</li> </ul>