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| **Strand: Science – Ecology** |
| **Topic: Photosynthesis** |
| **Grade: 7th Grade** |
| **Score 4.0** | **In addition to Score 3.0, in-depth inferences and applications that go beyond what was taught.**1.
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|  | **3.5** | In addition to score 3.0 performance, in-depth inferences and applications with partial success. |
| **Score 3.0** | **The student:**1. Understand that plants make their own food in the form of sugar molecules from carbon dioxide molecules and water molecules. In the process of making sugar molecules, oxygen molecules are produced as well.
	1. Can accurately place carbon dioxide, water, sugar and oxygen in the formula for photosynthesis
	2. Understand where the plant obtains the carbon dioxide and water to aid in photosynthesis
	3. Understand the sun’s role in photosynthesis
	4. Understand the plant stores the energy made from photosynthesis in the form of sugar.
	5. Understand the role chlorophyll plays in photosynthesis
2. Accurately identifies the parts of a plant where photosynthesis takes place.
3. Understand all organisms need food as a source of molecules that provide chemical energy and building materials.
4. Understand how the minerals from the soil are used by the plant.

**The student exhibits no major errors or omissions.** |
|  | **2.5** | No major errors or omissions regarding 2.0 content and partial knowledge of the 3.0 content. |
| **Score 2.0** | **There are no major errors or omissions regarding the simpler details and processes as the student:*** Recognizes or recalls specific terminology as related to photosynthesis:
1. Oxygen
2. Carbon Dioxide
3. Sugar
4. Water
5. Identifies the following parts of a plant: Stem, roots, leaves.
6. Minerals
7. Chlorophyll
8. Photosynthesis

**However, the student exhibits major errors or omissions regarding the more complex ideas and processes.** |
|  | **1.5** | Partial knowledge of the 2.0 content, but major errors or omissions regarding the 3.0 content. |
| **Score 1.0** | **With help, a partial understanding of some of the simpler details and processes and some of the more complex ideas and processes.** |
|  | **0.5** | With help, a partial understanding of the 2.0 content, but not the 3.0 content. |
| **Score 0.0** | **Even with help, no understanding or skill demonstrated.** |